

MANNOSIDASE STRUCTURES

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FIELD OF THE INVENTION

10 The present invention relates to crystal structures. In particular, the invention relates to crystals comprising a mannosidase II ligand binding domain (LBD), optionally having a ligand which is associated therewith. The structures may be used to determine mannosidase homologues and information about the secondary and tertiary structures of polypeptides which are as yet structurally uncharacterised. The structures may also be used to identify ligands which are
15 capable of binding the ligand binding domain. Such ligands may be capable of acting as modulators of mannosidase II activity.

BACKGROUND

20 Mannosidase II enzymes

There has been widespread interest in mannosidases in recent years, largely due to their role in a multitude of biological systems and, as a result, their potential as therapeutic targets. In particular, mammalian Golgi α -mannosidase II is involved in glycoprotein biosynthesis (especially in the maturation of N-linked oligosaccharides on newly synthesized
25 glycoproteins) and is currently an important therapeutic target for the development of anti-cancer agents (Goss et al (1995) Clin. Cancer Res. 1:935-944).

Golgi α -mannosidase II (mannosyl oligosaccharide 1,3-1,6- α -mannosidase II, EC 3.2.1.114; also referred to herein as "GMII") belongs to the glycosyl hydrolase family 38 (Henrissat,
30 1991; Coutinho and Henrissat, 1999) and is central to the Golgi processing pathway, as it specifically trims two mannose residues from the branched GlcNAcMan₅GlcNAc₂ mannose

intermediate (Figure 8A) to form the core GlcNAcMan₃GlcNAc₂ glycosyl structure, an essential precursor for the further addition of *N*-acetyl-glucosamine units. GMII is a Type II transmembrane protein, approximately 125 kD in size, composed of a short N-terminal cytoplasmic tail, a single-span transmembrane domain and a large luminal C-terminal catalytic portion (Moremen and Touster, 1985, 1986). The enzyme is highly specific for the presence of the single GlcNAc attached in a α 1,2 linkage to the Man α 1,3-Man arm of the GlcNAcMan₅GlcNAc₂-Asn-X substrate (Harpaz and Schachter, 1980). It removes the di-mannose branch (M6, M7; Figure 8A) by hydrolysis of both glycosidic bonds with net retention of sugar anomeric configuration, resulting in the final tri-mannose GlcNAcMan₃GlcNAc₂ core. There is little or no experimental evidence to date addressing whether the two bonds are cleaved in separate binding sites or sequentially in the same binding site, nor whether or not the singly-hydrolyzed product is released from the enzyme between the two cleavage events.

Mammalian lysosomal-mannosidase has significant sequence similarity to the GM II enzyme and is responsible for glycoprotein degradation (Moremen *et al* (1994) *Glycobiology* 4 113-125; Liao *et al* (1996) *J. Biol. Chem.* 271:28348-28358). In particular, lysosomal α -mannosidase II is involved in the catabolism of N-linked glycoproteins through the sequential degradation of high mannose, hybrid and complex oligosaccharides.

Mutations in the gene encoding mannosidase II cause α -mannosidosis, an autosomal recessive lysosomal storage disease (Ockermann (1967) *Lancet* 2:239-241).

A number of mannosidase II genes have been characterised from different sources, including the *Drosophila* gene (Foster *et al* (1995) *Gene* 154:183-186; Rabouille *et al* (1999) *J. Cell Sci.* 112:3319-3330), rat gene (Spiro *et al* (1997) *J. Biol. Chem.* 272:29356-29363) and human, mouse, bovine and feline genes (Beccari *et al* (1999) *Bioscience reports* 19:158-162). These mannosidases have been categorized as class II mannosidases, based on sequence alignment, and belong to family 38 in Henrissat's glycosidase classification (Moremen *et al* (1994) as above, Henrissat and Bairoch (1996) *Biochem J.* 316:695-696).

To date there have been significant problems with high level expression of these enzymes, which has impeded structural and mechanistic studies. Indeed, problems with expression have meant that α -mannosidase from Jack Bean (*Canavalia ensiformis*) has been used as a model enzyme for structural and functional characterisation (Howard et al (1998) J. Biol. Chem. 273:2067-2072; Kimura et al (1999) Eur. J. Biochem. 164:168-175). In view of the potential therapeutic application of mannosidase inhibitors, there is a need for direct structural characterisation of these enzymes.

10 Swainsonine

Swainsonine (SW) is an indolizidine alkaloid found in Australian Swainsona canescens (Colegate et al., Aust J Chem 32:2257-2264, 1979), North American plants of the genera Astragalus and (Molyneux R J and James L F., Science 215:190-191, 1981), and also the fungus Rhizoctonia leguminicola (Schneider et al., Tetrahedron 39:29-31, 1983).

15 Swainsonine is a potent and specific inhibitor of the lysosomal and golgi forms of alpha-mannosidase (Cenci di Bello et al., Biochem. J. 215, 693 (1983); Tulsiani et al., J. Biol. Chem. 257, 7936 (1982)). It has potential therapeutic value as an antimetastatic (Humphries et al., Cancer Res. 48, 1410 (1988)), and tumor-proliferative (Dennis, Cancer Res. 46, 5131 (1986)), or immunoregulatory agent (Kino et al., J. Antibiot. 38, 936 (1985)). Swainsonine has also been shown to have positive effects on cellular immunity in mice (reviewed in Humphries M. J. and Olden K., Pharmacol Ther. 44:85-105, 1989, and Olden et al., Pharmacol Ther 50:285-290, 1991)).

25 Structural information about the interaction between swainsonine and mannosidase II enzymes would provide a basis for rational modification of swainsonine derivatives with altered activities. It would also provide a framework on which new ligands could be designed which mimic some of the swainsonine:mannosidase atomic interactions.

SUMMARY OF THE INVENTION

The present invention is based on the finding that, after extensive modifications to the protocol, it is possible to express mannosidase II in appreciable quantities. The present invention is also based on the finding that it is possible to crystallize the protein mannosidase II, both alone and in combination with a selection of different ligands. More particularly, it has been possible to identify the specific sites of mannosidase II which are associated with binding to swainsonine and the mannose-like compound deoxymannojirimycin (DMNJ). The structure was also shown to exhibit a previously unobserved folding pattern enabling the design of novel GMII-specific inhibitors.

Binding domains are of significant utility in drug discovery. The association of natural ligands and substrates with the binding domains of mannosidases is the basis of many biological mechanisms. In addition, many drugs (e.g. swainsonine) exert their effects through association with the binding domains of mannosidases. The associations may occur with all or any parts of a binding domain. An understanding of these associations will lead to the design and optimization of drugs having more favorable associations with their target enzyme and thus provide improved biological effects. Therefore, information about the shape and structure of mannosidases and their ligand-binding domains is invaluable in designing potential modulators of mannosidases for use in treating diseases and conditions associated with or modulated by the mannosidases.

Thus, according to a first aspect of the invention, there is provided a crystal comprising a mannosidase II ligand-binding domain. In a preferred embodiment the crystal is a crystal of a mannosidase II enzyme. The structure of a crystal of mannosidase II has been solved and is set forth in Table 1, Table 2, or Table 8.

The crystal may comprise a complex between a mannosidase II ligand-binding domain and at least one ligand, for example an inhibitor of mannosidase II. In a particularly preferred embodiment that crystal comprises a complex between mannosidase II and swainsonine. The

structure of a crystal of a complex between mannosidase II and swainsonine has been solved, and is set forth in Table 2 or Table 8.

In a second aspect, the present invention provides a crystal comprising swainsonine or a derivative thereof. In a preferred embodiment, the crystal comprises a complex between swainsonine (or a derivative thereof) and a mannosidase II ligand-binding domain. The structure of a crystal of a complex between mannosidase II and swainsonine has been solved, and is set forth in Table 2, or Table 8.

According to a third aspect of the invention, there is provided a model of at least part of a mannosidase II, made using a crystal according to the first aspect of the invention. In a preferred embodiment, the model comprises the mannosidase II ligand-binding domain. There is also provided a model of swainsonine or a derivative thereof made using a crystal according to the second aspect of the invention.

The crystal of the first and second aspect of the invention and a model of the third aspect of the invention may be provided in the form of a computer readable medium.

The crystals and models of earlier aspects of the invention may provide information about the atomic contacts involved in the interaction between the enzyme and a known ligand, which can be used to screen for unknown ligands. According to a fourth aspect of the invention, there is provided a method of screening for a ligand capable of binding a mannosidase II ligand binding domain, comprising the use of a crystal according to the first or second aspects of the invention or a model according to the third aspect of the invention. For example, the method may comprise the step of contacting the ligand binding domain with a test compound, and determining if said test compound binds to said ligand binding domain.

In a fifth aspect, the present invention provides a ligand identified by a screening method of the fourth aspect of the invention. Preferably the ligand is a modulator that is capable of modulating the activity of a mannosidase II enzyme.

A crystal and/or model of the invention may be used to design, evaluate, and identity modulators of a mannosidase II or homologues thereof other than ligands that associate with a mannosidase II. The modulators may be based on the shape and structure of a mannosidase II, or a ligand binding domain or atomic interaction, or atomic contacts thereof. Therefore modulators may be derived from ligand binding domains or analogues or parts thereof.

Modulators (e.g. ligands) which are capable of modulating the activity of mannosidase II enzymes have considerable therapeutic and prophylactic potential. In a sixth aspect, the present invention provides the use of a modulator of the invention in the manufacture of a medicament to treat and/or prevent a disease in a mammalian patient. There is also provided a pharmaceutical composition comprising a modulator and a method of treating and/or preventing a disease comprising the step of administering such a modulator or pharmaceutical composition to a mammalian patient.

A potential modulator of a mannosidase II identified by a method of the present invention may be confirmed as a modulator by synthesizing the compound, and testing its effect on the enzymatic activity of mannosidase II in an assay. Such assays are known in the art.

Therefore, the methods of the invention for identifying ligands or modulators may comprise one or more of the following additional steps:

- (a) testing whether the modulator or ligand is a modulator of the activity of a mannosidase II, preferably testing the activity of the modulator or ligand in cellular assays and animal model assays;
- (b) modifying the modulator or ligand;
- (c) optionally rerunning steps (a) or (b); and
- (d) preparing a pharmaceutical composition comprising the modulator or ligand.

Steps (a), (b) (c) and (d) may be carried out in any order, at different points in time, and they need not be sequential.

The crystal structures and models described above also provide information about the secondary and tertiary structure of mannosidase II enzymes. This can be used to glean structural information about other, previously uncharacterised polypeptides. According to a seventh aspect of the invention there is provided a method of determining the secondary and/or tertiary structures of polypeptides with unknown (or only partially known) structure comprising the step of using such a crystal or model. The polypeptide under investigation is preferably structurally or functionally related to the mannosidase II enzyme. For example, the polypeptide may show a degree of homology over some or all parts of the primary amino acid sequence. Alternatively, the polypeptide may perform an analogous function or be suspected to show a similar catalytic mechanism to the mannosidase II enzyme.

Aspects of the invention are presented in the accompanying claims and in the following description, drawings, and Tables.

15 DESCRIPTION OF THE FIGURES AND TABLES

The present invention will now be described only by way of example and with reference to the accompanying figures and tables, wherein:

20 Figure 1 shows the active site of mannosidase II.

Figure 2 shows the secondary structure of *Drosophila* Golgi α -mannosidase II. Helices are in blue and β sheets are in red.

25 Figure 3 shows the *Drosophila* golgi α -mannosidase II molecule with the colours representing where it is identical to human GMII. The red and blue represent deletions or insertions with respect to the human sequence. The green is a disulphide bond.

Figure 4 shows the whole *Drosophila* golgi α -mannosidase II molecule in sticks with residues that are identical in the lysosomal manII as coloured balls (red or blue depending whether they are in the N-terminal or C-terminal part of the molecule).

- 5 Figure 5 shows the active site of a *Drosophila* mannosidase.

Figure 6 shows the DNA sequence of an expressed *Drosophila* mannosidase.

- 10 Figure 7 shows an alignment of expressed secreted *Drosophila* mannosidase with human mannosidase.

- Figure 8 shows A). Schematic representation of the high mannose GlcNAcMan₅GlcNAc₂ substrate of dGMII. B) Ribbon representation of the dGMII structure, top-view, C) side-view. The loop formed by residues 527-540 is shown in yellow. All molecular images were prepared using MOLSCRIPT (Kraulis, 1991) and rendered using Raster3D (Merritt and Bacon, 1997)
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- Figure 9 shows a molecular surface representation of the convex face (A) and the planar face (B) of the dGMII molecule. Molecular surface images are colored for electrostatic potential (red for negative, blue for positive). C) Molecular surface representation of the planar face of dGMII, colored for homology with the sequence of human Golgi α -mannosidase II (dark-green for identical, light-green for homologous, yellow for similar, and white for different residues). Alignment of human and *Drosophila* Golgi α -mannosidase II sequences (SwissProt accession numbers Q16706 and Q24451, respectively) was performed using the GAP program of the Wisconsin package (Version 10, Genetics Computer Group) using the default parameters without any manual intervention. The scores were used to colour the molecular surface. All molecular surface images were produced using GRASP (Nicholls et al., 1991).
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- Figure 10 shows stereo views of the active site of dGMII with bound Tris (A), DMNJ (B), and swainsonine (C) molecules. The active site zinc ion is shown in turquoise, the bound inhibitor
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molecules are rendered in gold and water molecules are represented as transparent red spheres. Hydrogen bonds are shown as blue dashed lines.

- Figure 11 shows A) Molecular surface representation of dGMII showing the position of the active site bound Tris molecule and the 2-methyl-2,4-pentanediol (MPD) binding site. B) Molecular surface representation of dGMII with the GlcNAcMan₅GlcNAc₂ substrate modeled into the binding pocket. The substrate molecule is positioned into the binding pocket with α 1,6-linked mannose M6 (shown in green) docked into the active site and β 1,2-GlcNAc residue G3 (shown in black) placed in the MPD binding site. Individual mannose residues of the substrate are colored according to the coloring scheme used in Figure 8A. C) Representation of the sequential trimming of the α 1,6 (M6) and α 1,3-linked (M7) mannose residues. Figure 11A was produced using LIGPLOT (Wallace et al., 1995). All molecular surface images were produced using GRASP (Nicholls et al., 1991).
- Table 1 shows the structural coordinates of a *Drosophila* Golgi α -mannosidase II.
- Table 2 shows the structural coordinates of a *Drosophila* Golgi α -mannosidase II with swainsonine.
- Table 3 shows the ligand binding domain (active site) of a mannosidase II.
- Table 4 shows the intermolecular contacts of a *Drosophila* Golgi α -mannosidase II swainsonine complex.
- Table 5 shows crystallographic refinement statistics for the native *Drosophila* Golgi mannosidase II.
- Table 6 shows crystallographic refinement statistics for *Drosophila* Golgi mannosidase II associated with swainsonine.

Table 7 shows a list of Mannosidase II enzymes.

Table 8 shows the structural coordinates of a *Drosophila* Golgi α -mannosidase II with swainsonine, a zinc ion, Tris molecule and an N-glycan.

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Table 9 shows data collection statistics for MAD (Se-Met) of dGMII and native dGMII.

Table 10 shows refinement statistics of dGMII, dGMII-swainsonine complex, and dGMII-DMNJ complex.

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In Tables 1, 2, and 8 from the left, the second column identifies the atom number; the third identifies the atom type; the fourth identifies the amino acid type; the sixth identifies the residue number; the seventh identifies the x coordinates; the eighth identifies the y coordinates; the ninth identifies the z coordinates; the tenth identifies the occupancy; and the eleventh identifies the temperature factor.

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DETAILED DESCRIPTION OF THE INVENTION

Unless otherwise indicated, all terms used herein have the same meaning as they would to one skilled in the art of the present invention. Practitioners are particularly directed to Current Protocols in Molecular Biology (Ansubel) for definitions and terms of the art. Abbreviations for amino acid residues are the standard 3-letter and/or 1-letter codes used in the art to refer to one of the 20 common L-amino acids.

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In a first aspect, the present invention relates to a crystal comprising a mannosidase II ligand binding domain.

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Crystal

As used herein, the term "crystal" means a structure (such as a three dimensional (3D) solid aggregate) in which the plane faces intersect at definite angles and in which there is a regular

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structure (such as internal structure) of the constituent chemical species. Thus, the term “crystal” can include any one of: a solid physical crystal form such as an experimentally prepared crystal, a crystal structure derivable from the crystal (including secondary and/or tertiary and/or quaternary structural elements), a 2D and/or 3D model based on the crystal structure, a representation thereof such as a schematic representation thereof or a diagrammatic representation thereof, or a data set thereof for a computer.

In one aspect, the crystal is usable in X-ray crystallography techniques. Here, the crystals used can withstand exposure to X-ray beams used to produce a diffraction pattern data necessary to solve the X-ray crystallographic structure. A crystalline form of a mannosidase, may be characterized as being capable of diffracting x-rays in a pattern defined by one of the crystal forms depicted in Blundel et al 1976, Protein Crystallography, Academic Press.

A crystal of the invention includes a mannosidase II or part thereof (e.g. ligand binding domain) in association with one or more moieties, including heavy-metal atoms i.e. a derivative crystal, a metal cofactor, or one or more ligands or substrates i.e. a co-crystal.

The term “associate”, “association” or “associating” refers to a condition of proximity between a moiety (i.e. chemical entity or compound or portions or fragments thereof), and a mannosidase II, or parts or fragments thereof (e.g. binding sites or domains). The association may be non-covalent i.e. where the juxtaposition is energetically favoured by for example, hydrogen-bonding, van der Waals, or electrostatic or hydrophobic interactions, or it may be covalent.

The term “heavy-metal atoms” refers to an atom that can be used to solve an x-ray crystallography phase problem, including but not limited to a transition element, a lanthanide metal, or an actinide metal. Lanthanide metals include elements with atomic numbers between 57 and 71, inclusive. Actinide metals include elements with atomic numbers between 89 and 103, inclusive.

Multiwavelength anomalous diffraction (MAD) phasing may be used to solve protein structures using selenomethionyl (SeMet) proteins. Therefore, a complex of the invention may comprise a crystalline mannosidase II or part thereof (e.g. ligand binding domain) with selenium associated with the methionine residues of the protein.

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In an embodiment of the invention, a ligand binding domain is in association with a metal cofactor in the crystal. A "metal cofactor" refers to a metal required for mannosidase activity and/or stability. For example, the metal cofactor may be zinc, and other similar atoms or metals. In a preferred embodiment a LBD is in association with Zn^{2+} .

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A ligand binding domain in a complex with a cofactor preferably comprises one or more of the residues involved in coordination of a Zn^{2+} ion, namely: aspartate residues 92 and 204, and histidines 90 and 471.

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The crystal may comprise a complex between a ligand-binding domain and one or more ligands. In other words the ligand binding domain may be associated with one or more ligands in the crystal. The ligand may be any compound which is capable of interacting stably and specifically with the ligand binding domain. The ligand may, for example, be an inhibitor of mannosidase II, including but not limited to swainsonine and the mannose-like compound deoxymannojirimycin (DMNJ).

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In a preferred embodiment the ligand associated with said mannosidase II ligand binding domain is swainsonine, or an analogue or derivative thereof. Swainsonine is an indolizidine alkaloid found in a variety of sources (Colegate et al., (1979); Molyneux and James (1981); and Schneider et al. (1983) all as above) which has been known to be an inhibitor of mannosidase II enzymes for some time. Derivatives of swainsonine are also known in the art, for example US 5962467, US 5,650,413, and U.S. 6,048,870, describe various derivatives of swainsonine, processes for their preparation and their use as therapeutic agents.

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In an embodiment a crystal of the invention comprises a ligand binding domain of a mannosidase II in association with swainsonine. These complexes may have the structural coordinates shown in Table 2, or Table 8.

- 5 In a second aspect, the present invention also provides a crystal comprising swainsonine or a derivative thereof. Preferably the swainsonine molecule has the three dimensional structure defined by the relevant structural coordinates shown in Table 2, or Table 8.

10 The crystal may also comprise a complex between mannosidase II (or part thereof) and a substrate, or analogue thereof. The term “substrate” refers to molecules that associate with a mannosidase II as it hydrolyzes linkages between mannose residues. Mannosidases II enzymes release α -D-mannose as a first formed product and they follow a double-displacement mechanism in which a glycosyl-enzyme intermediate is formed and hydrolyzed via oxocarbenium ion-like transition states. The formation of the intermediate is assisted by general acid catalysis from a carboxylic acid located in the active site. The residue also serves as the
15 general base catalyst for the second deglycosylation step. A second carboxylic acid serves as the nucleophile that forms the covalent intermediate. Thus, the substrate molecule may comprise molecules such as the glycosyl moiety that forms an intermediate with the enzyme. (See Howard, S. et al, J. Biol. Chem. (1998) 273. 2067-2072 and references 11, 12, 14, 15, and 16
20 therein). An analogue of a substrate is one which mimics the substrate binding in the LBD, but which is incapable (or has a significantly reduced capacity) to take part in the catalytic reaction.

A number of substrates for Golgi α -mannosidase II are known including the artificial substrate PNP-mannose (Rabouille et al (1999) as above). Lysosomal mannosidase II is
25 involved in glycoprotein degradation. In particular lysosomal mannosidase II hydrolyses $\alpha(1,2)$ $\alpha(1,3)$ and $\alpha(1,6)$ linkages between mannose residues. Substrates for this enzyme are thought to include high mannose, hybrid and complex oligosaccharides.

In an embodiment, the substrate comprises GlcNAcMan₅GlcNAc₂-Asn-.

A complex may comprise one or more of the intermolecular interactions identified in Table 4. A structure of a complex of the invention may be defined by selected intermolecular contacts, preferably the intermolecular contacts as defined in Table 4.

- 5 A crystal of the invention may be characterized by an N-terminal α/β domain, a C-terminal portion comprising a three-helical bundle, and an all- β C-terminal domain, connected by 5 internal disulfide bonds and stabilized by a zinc binding site (Figure 8B).

The N-terminal α/β domain is characterized as follows:

- 10 (a) comprising an inner core of three β -sheets (A, B and C, Figure 8B) consisting of 11, mostly parallel β -strands, surrounded by 16 α -helices;
- (b) comprising a GlcNAc residue at a consensus N-glycosylation site (Asn-194), located at the N-terminus of helix 7.
- 15 (c) stabilized by three disulfide bonds: between Cys-31 and Cys-1032 connecting the N and C-terminal extremes of dGMII; Cys-275 and Cys-282 linking helices 10 and 11; Cys-283 and Cys-297 linking helix 11 with a loop between helix 13 and the core of parallel β -sheets.

The C-terminal portion is characterized as follows:

- 20 (a) a three-helix bundle comprises helices 18, 20 and 21 connected to the N-terminal α/β -domain via a zinc binding site.
- (b) a zinc ion coordinated in a T_3 -square-based pyramidal geometry involving residues: Asp-90, His-92, Asp-204 and His-471.
- 25 (c) two immunoglobulin-like domains: a small β -sandwich consisting of 12 anti-parallel strands from β -sheets D and E, and a large 21-strand structure involving β -sheets F and G.
- (d) a barrel formed by the three-helix bundle, helix-23, and the two β -sandwich structures providing a narrow pore in the center of the C-terminal domain.

The barrel in the C-terminal portion is lined by six arginine residues: Arg-540, 565, 617, 770, 777 and 893, contributing to the overall positive charge of the pore (Figure 9A). A hairpin loop, connecting two strands of β -sheet D (Figure 8B and C, residues 527-540, shown in yellow) protrudes into the center of the barrel on the planar side of the molecule. Arginine residue 530, located at the tip of the type-I β -turn in this loop, plugs the pore preventing an open channel through the protein. The resulting crater-like cavity on the convex side of the molecule is 20Å deep, with a diameter of 20Å funneling to 8Å at the bottom of the cavity. The loop has a higher degree of flexibility compared to the rest of the structure (average B-factor values: $\sim 33\text{\AA}^2$ and $\sim 15\text{\AA}^2$, respectively).

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A crystal of the invention may enable the determination of structural data for a ligand or substrate. In order to be able to derive structural data for the ligand or substrate, it is necessary for the molecule to have sufficiently strong electron density to enable a model of the molecule to be built using standard techniques. For example, there should be sufficient electron density to allow a model to be built using XTALVIEW (McRee 1992 J. Mol. Graphics. 10 44-46).

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Preferably, the crystal of the invention belongs to space group $P2_12_12_1$.

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The term “space group” refers to the lattice and symmetry of the crystal. In a space group designation the capital letter indicates the lattice type and the other symbols represent symmetry operations that can be carried out on the contents of the asymmetric unit without changing its appearance.

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Preferably, a crystal of said complex comprises a unit cell having the following unit dimensions: $a=69 (\pm 5) \text{\AA}$, $b=110 (\pm 5) \text{\AA}$, $c=139 (\pm 5) \text{\AA}$.

The term “unit cell” refers to the smallest and simplest volume element (i.e. parallelepiped-shaped block) of a crystal that is completely representative of the unit of pattern of the crystal. The unit cell axial lengths are represented by a, b, and c. Those of skill in the art understand

that a set of atomic coordinates determined by X-ray crystallography is not without standard error.

5 In a highly preferred embodiment, the crystal comprises the structural coordinates as shown in Table 1, Table 2, or Table 8.

10 As used herein, the term “structural coordinates” refer to a set of values that define the position of one or more amino acid residues with reference to a system of axes. The term refers to a data set that defines the three dimensional structure of a molecule or molecules (e.g. Cartesian coordinates, temperature factors, and occupancies). Structural coordinates can be slightly modified and still render nearly identical three dimensional structures. A measure of a unique set of structural coordinates is the root-mean-square deviation of the resulting structure. Structural coordinates that render three dimensional structures (in particular a three dimensional structure of an SGC domain) that deviate from one another by a root-mean-square deviation of less than 5 Å, 4 Å, 3 Å, 2 Å, or 1.5 Å may be viewed by a person of ordinary skill in the art as very similar.

15 Variations in structural coordinates may be generated because of mathematical manipulations of the structural coordinates of a mannosidase described herein. For example, the structural coordinates of Table 1, 2, or 8 may be manipulated by crystallographic permutations of the structural coordinates, fractionalization of the structural coordinates, integer additions or subtractions to sets of the structural coordinates, inversion of the structural coordinates or any combination of the above.

25 Variations in the crystal structure due to mutations, additions, substitutions, and/or deletions of the amino acids, or other changes in any of the components that make up the crystal may also account for modifications in structural coordinates. If such modifications are within an acceptable standard error as compared to the original structural coordinates, the resulting structure may be the same. Therefore, a ligand that bound to a ligand binding domain of a mannosidase would also be expected to bind to another ligand binding domain whose

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structural coordinates defined a shape that fell within the acceptable error. Such modified structures of a ligand binding domain thereof are also within the scope of the invention.

Various computational analyses may be used to determine whether a molecule or the ligand binding domain thereof is sufficiently similar to all or parts of a ligand binding domain thereof. Such analyses may be carried out using conventional software applications and methods as described herein.

The crystal may also be specifically characterised by the refinement statistics set out in Tables 5, 6, or 10.

MANNOSIDASE II

The term “mannosidase II” refers to eukaryotic mannosidases involved in the biosynthesis of glycoproteins, glycolipids, glycosylphosphatidylinositols and other complex glycoconjugates, and prokaryotic mannosidases involved in the synthesis of carbohydrate structures of bacteria and viruses. In particular, the term refers to the class of mannosidases categorized as class II mannosidases, based on sequence alignment, belonging to family 38 in Henrissat’s glycosidase classification (Moremen, K.W. et al (1994) *GlycoBiology* 4, 113-125; Henrissat, B. and Bairoch A. (1996) *Biochem J.* 316, 695-696; Henrissat, B. and Bairoch A. (1993) *Biochem J.* 293, 781-788; Henrissat, B. and Bairoch A. (1991) *Biochem J.* 280, 309-316). Examples of mannosidase II enzymes include those listed in Table 7 (from http://afmb.cnrs-mrs.fr/~pedro/CAZY/ghf_38.html).

The invention generally relates to mannosidase II enzymes and parts thereof. Mannosidase II enzymes catalyze the first committed step in the biosynthesis of complex N-glycans and they control conversion of high mannose to complex N-glycans.

Mannosidases are derivable from a variety of sources, including viruses, bacteria, fungi, plants, and animals. In a preferred embodiment the glycosyltransferase is derivable from an

animal, preferably a mammal including but not limited to bovine, ovine, porcine, murine equine, most preferably a human. The enzyme may be from any source, whether natural, synthetic, semi-synthetic, or recombinant.

- 5 A mannosidase or part thereof in the present invention may be a wild type enzyme, or part thereof, or a mutant, variant or homologue of such an enzyme.

The term "wild type" refers to a polypeptide having a primary amino acid sequence which is identical with the native enzyme (for example, the mammalian enzyme).

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The term "mutant" refers to a polypeptide having a primary amino acid sequence which differs from the wild type sequence by one or more amino acid additions, substitutions or deletions. Preferably, the mutant has at least 90% sequence identity with the wild type sequence. Preferably, the mutant has 20 mutations or less over the whole wild-type sequence.

- 15 More preferably the mutant has 10 mutations or less, most preferably 5 mutations or less over the whole wild-type sequence.

- The term "variant" refers to a naturally occurring polypeptide which differs from a wild-type sequence. A variant may be found within the same species (i.e. if there is more than one isoform of the enzyme) or may be found within a different species. Preferably the variant has at least 90% sequence identity with the wild type sequence. Preferably, the variant has 20 mutations or less over the whole wild-type sequence. More preferably, the variant has 10 mutations or less, most preferably 5 mutations or less over the whole wild-type sequence.

- 25 The term "part" indicates that the polypeptide comprises a fraction of the wild-type amino acid sequence. It may comprise one or more large contiguous sections of sequence or a plurality of small sections. In an embodiment, the "part" comprises a wild type mannosidase enzyme with the cytosolic and transmembrane domains and most of the stalk region eliminated, preferably the "part" comprises amino acid residues 31-1044 of Golgi α -mannosidase. The "part" may comprise a ligand binding domain as described herein. The
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polypeptide may also comprise other elements of sequence, for example, it may be a fusion protein with another protein (such as one which aids isolation or crystallisation of the polypeptide). Preferably the polypeptide comprises at least 50%, more preferably at least 65%, most preferably at least 80% of the wild-type sequence.

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The term "homologue" means a polypeptide having a degree of homology with the wild-type amino acid sequence. The term "homology" can be equated with "identity".

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In the present context, an homologous sequence is taken to include an amino acid sequence which may be at least 75, 85 or 90% identical, preferably at least 95 or 98% identical to the wild-type sequence. Typically, the homologues will comprise the same sites (for example ligand binding domain) as the subject amino acid sequence. Although homology can also be considered in terms of similarity (i.e. amino acid residues having similar chemical properties/functions), in the context of the present invention it is preferred to express homology in terms of sequence identity.

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Homology comparisons can be conducted by eye, or more usually, with the aid of readily available sequence comparison programs. These commercially available computer programs can calculate % homology between two or more sequences.

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Percentage homology may be calculated over contiguous sequences, i.e. one sequence is aligned with the other sequence and each amino acid in one sequence is directly compared with the corresponding amino acid in the other sequence, one residue at a time. This is called an "ungapped" alignment. Typically, such ungapped alignments are performed only over a relatively short number of residues.

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Although this is a very simple and consistent method, it fails to take into consideration that, for example, in an otherwise identical pair of sequences, one insertion or deletion will cause the following amino acid residues to be put out of alignment, thus potentially resulting in a large reduction in % homology when a global alignment is performed. Consequently, most

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sequence comparison methods are designed to produce optimal alignments that take into consideration possible insertions and deletions without penalising unduly the overall homology score. This is achieved by inserting “gaps” in the sequence alignment to try to maximise local homology.

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However, these more complex methods assign “gap penalties” to each gap that occurs in the alignment so that, for the same number of identical amino acids, a sequence alignment with as few gaps as possible - reflecting higher relatedness between the two compared sequences - will achieve a higher score than one with many gaps. “Affine gap costs” are typically used that charge a relatively high cost for the existence of a gap and a smaller penalty for each subsequent residue in the gap. This is the most commonly used gap scoring system. High gap penalties will of course produce optimised alignments with fewer gaps. Most alignment programs allow the gap penalties to be modified. However, it is preferred to use the default values when using such software for sequence comparisons. For example when using the GCG Wisconsin Bestfit package the default gap penalty for amino acid sequences is -12 for a gap and -4 for each extension.

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Calculation of maximum % homology therefore firstly requires the production of an optimal alignment, taking into consideration gap penalties. A suitable computer program for carrying out such an alignment is the GCG Wisconsin Bestfit package (University of Wisconsin, U.S.A.; Devereux *et al.*, 1984, *Nucleic Acids Research* 12:387). Examples of other software than can perform sequence comparisons include, but are not limited to, the BLAST package (see Ausubel *et al.*, 1999 *ibid* – Chapter 18), FASTA (Atschul *et al.*, 1990, *J. Mol. Biol.*, 403-410) and the GENWORKS suite of comparison tools. Both BLAST and FASTA are available for offline and online searching (see Ausubel *et al.*, 1999 *ibid*, pages 7-58 to 7-60). However, for some applications, it is preferred to use the GCG Bestfit program. A new tool, called BLAST 2 Sequences is also available for comparing protein and nucleotide sequence (see *FEMS Microbiol Lett* 1999 174(2): 247-50; *FEMS Microbiol Lett* 1999 177(1): 187-8 and tatiana@ncbi.nlm.nih.gov).

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Although the final % homology can be measured in terms of identity, the alignment process itself is typically not based on an all-or-nothing pair comparison. Instead, a scaled similarity score matrix is generally used that assigns scores to each pairwise comparison based on chemical similarity or evolutionary distance. An example of such a matrix commonly used is the BLOSUM62 matrix - the default matrix for the BLAST suite of programs. GCG Wisconsin programs generally use either the public default values or a custom symbol comparison table if supplied (see user manual for further details). For some applications, it is preferred to use the public default values for the GCG package, or in the case of other software, the default matrix, such as BLOSUM62.

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Once the software has produced an optimal alignment, it is possible to calculate % homology, preferably % sequence identity. The software typically does this as part of the sequence comparison and generates a numerical result.

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The sequences may have deletions, insertions or substitutions of amino acid residues which produce a silent change and result in a functionally equivalent enzyme. Deliberate amino acid substitutions may be made on the basis of similarity in polarity, charge, solubility, hydrophobicity, hydrophilicity, and/or the amphipathic nature of the residues as long as the secondary binding activity of the substance is retained. For example, negatively charged amino acids include aspartic acid and glutamic acid; positively charged amino acids include lysine and arginine; and amino acids with uncharged polar head groups having similar hydrophilicity values include leucine, isoleucine, valine, glycine, alanine, asparagine, glutamine, serine, threonine, phenylalanine, and tyrosine.

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Conservative substitutions may be made, for example according to the Table below. Amino acids in the same block in the second column and preferably in the same line in the third column may be substituted for each other:

ALIPHATIC	Non-polar	G A P
		I L V
	Polar – uncharged	C S T M
		N Q
	Polar – charged	D E
		K R
AROMATIC		H F W Y

The polypeptide may also have a homologous substitution (substitution and replacement are both used herein to mean the interchange of an existing amino acid residue, with an alternative residue) i.e. like-for-like substitution such as basic for basic, acidic for acidic, polar for polar etc. Non-homologous substitution may also occur i.e. from one class of residue to another or alternatively involving the inclusion of unnatural amino acids such as ornithine (hereinafter referred to as Z), diaminobutyric acid ornithine (hereinafter referred to as B), norleucine ornithine (hereinafter referred to as O), pyriylalanine, thienylalanine, naphthylalanine and phenylglycine.

Replacements may also be made by unnatural amino acids include; alpha* and alpha-disubstituted* amino acids, N-alkyl amino acids*, lactic acid*, halide derivatives of natural amino acids such as trifluorotyrosine*, p-Cl-phenylalanine*, p-Br-phenylalanine*, p-I-phenylalanine*, L-allyl-glycine*, β -alanine*, L- α -amino butyric acid*, L- γ -amino butyric acid*, L- α -amino isobutyric acid*, L- ϵ -amino caproic acid[#], 7-amino heptanoic acid*, L-methionine sulfone[#]*, L-norleucine*, L-norvaline*, p-nitro-L-phenylalanine*, L-hydroxyproline[#], L-thioprolin*, methyl derivatives of phenylalanine (Phe) such as 4-methyl-Phe*, pentamethyl-Phe*, L-Phe (4-amino)[#], L-Tyr (methyl)*, L-Phe (4-isopropyl)*, L-Tic (1,2,3,4-tetrahydroisoquinoline-3-carboxyl acid)[#], L-diaminopropionic acid[#] and L-Phe (4-benzyl)*. The notation * has been utilised for the purpose of the discussion above (relating to

homologous or non-homologous substitution), to indicate the hydrophobic nature of the derivative whereas # has been utilised to indicate the hydrophilic nature of the derivative, #* indicates amphipathic characteristics.

- 5 Variant amino acid sequences may include suitable spacer groups that may be inserted between any two amino acid residues of the sequence including alkyl groups such as methyl, ethyl or propyl groups in addition to amino acid spacers such as glycine or β -alanine residues. A further form of variation, involving the presence of one or more amino acid residues in peptoid form, will be well understood by those skilled in the art. For the avoidance of doubt,
- 10 "the peptoid form" is used to refer to variant amino acid residues wherein the α -carbon substituent group is on the residue's nitrogen atom rather than the α -carbon. Processes for preparing peptides in the peptoid form are known in the art, for example Simon RJ et al., PNAS (1992) 89(20), 9367-9371 and Horwell DC, Trends Biotechnol. (1995) 13(4), 132-134.

15 **LIGAND-BINDING DOMAIN**

- As used herein, the term "ligand binding domain (LBD)" refers to a region of a molecule or molecular complex that as a result of its shape, favourably associates with a ligand or a part thereof. For example, it may be a region of a mannosidase that is responsible for binding a
- 20 substrate or modulator (e.g. swainsonine). With reference to the crystal of the present invention residues in the LBD may be defined by their spatial proximity to the ligand (for example swainsonine or substrate) in the crystal structure.

- "Ligand" refers to a compound or entity that associates with a ligand binding domain,
- 25 including substrates or analogues or parts thereof, or modulators of a mannosidase including inhibitors. A ligand may be designed rationally by using a model according to the present invention.

- The term "ligand binding domain (LBD)" also includes a homologue of the ligand binding
- 30 domain or a portion thereof.

As used herein, the term "homologue" in reference to a ligand binding domain refers to ligand binding domain or a portion thereof which may have deletions, insertions or substitutions of amino acid residues as long as the binding specificity of the molecule is retained. In this regard, deliberate amino acid substitutions may be made on the basis of similarity in polarity, charge, solubility, hydrophobicity, hydrophilicity, and/or the amphipathic nature of the residues as long as the binding specificity of the ligand binding domain is retained.

As used herein, the term "portion thereof" means the structural coordinates corresponding to a sufficient number of amino acid residues of the mannosidase II LBD (or homologues thereof) that are capable of interacting with a test compound capable of binding to the LBD. This term includes mannosidase II ligand binding domain amino acid residues having an amino acid residues from about 4Å to about 5Å of a bound compound or fragment thereof. Thus, for example, the structural coordinates provided in the crystal structure may contain a subset of the amino acid residues in the LBD which may be useful in the modelling and design of compounds that bind to the LBD.

A ligand binding domain may be defined by its association with a ligand. With reference to a crystal of the present invention, residues in the LBD may be defined by their spatial proximity to a ligand in the crystal structure. For example, such may be defined by their proximity to a substrate or modulator (e.g. swainsonine).

The active site of a mannosidase II crystal of the invention may be characterized as follows:

- (a) a small cavity lined by aromatic residues Trp-95, Phe-206, Tyr-269 and Tyr-727;
- (b) a zinc ion binding site within the cavity characterized by a T₅-square-based pyramidal geometry and 'elec-His-Zn motifs'.

A binding domain for a GMII inhibitor such as swainsonine and DMNJ, comprises one or more of Trp-95, Phe-206 and Tyr-727 which form a binding cavity for the inhibitor. The inhibitor ring structures can be stacked against Trp-95, and stabilized by hydrogen bonds and

interactions with the zinc ion. When bound to an inhibitor the zinc ion binding domain of the GMII can be transformed into T_6 -octahedral coordination. The binding domain allows for the formation of a hydrogen bond between the zinc-coordinating OD1 oxygen of Asp-204 and the N4 nitrogen at the fusion of the five and six-membered rings of swainsonine. The zinc coordinating oxygen atoms of the inhibitors are involved in hydrogen bond interactions with the neighboring metal binding residues of the enzyme.

The position of the inhibitor molecules is stabilized in the active site by hydrogen bonds between carboxylic oxygens OD1 and OD2 of residue Asp-472 and hydroxyl oxygens O3 and O4 (O5 in swainsonine) of the inhibitors. DMNJ is involved in additional hydrogen bonds, via water molecules, with the NH_2 nitrogen of Arg-228, the hydroxyl oxygen of Tyr-269, the backbone carbonyl oxygen of Arg-876, and the OD1 oxygen of Asp-204.

In an embodiment, a ligand binding domain comprises one or more of the following amino acid residues: His 471, His 90, and Asp 92, and Asp 204; or a homologue thereof

In a second embodiment, a ligand binding domain comprises one or more of the following amino acid residues: Trp-95, Phe-206, Tyr-269, and Tyr-727.

In another embodiment, a ligand binding domain comprises one or more of the following amino acid residues: Asp-92, Asp-204, His-90, His-471.

In still another embodiment, a ligand binding domain comprises one or more of the following amino acid residues: His 471, Asp 204, Asp 341, His 90, Asp 92, Asp 472, Phe 206, Tyr 727 and Trp 95; or a homologue thereof

In yet another embodiment a ligand binding domain comprises one or more of the following groups:

(a) GVWKQG (residues 60-65)

- (b) VFVVP HSHND (residues 83-92)
- (c) WAIDPFGH (residues 201-208)
- (d) HMMPFYSDIPHTCGPDPK^V/I^ICCQFDFKR (residues 262-289)
- (e) LL^I/A^IPLGDDFR (residues 334-343):

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In an aspect of the invention, a ligand binding domain comprises one or more of the enzyme residues shown in Table 3 and/or Table 4.

A crystal of a binding domain may be defined by selected atomic contacts.

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In an embodiment, the binding site of the mannosidase II inhibitor swainsonine is described in Table 3, and details of the atomic interactions of the binding site are set out in Table 4. In the swainsonine binding site there are direct hydrogen bonds between the inhibitor and the enzyme. Atomic contacts on the enzyme comprise Trp-95, Phe-206, Tyr-727, Asp-472, Asp 204 (see Table 4, Figures 1 and 5).

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In a particular embodiment of the invention, a secondary or three-dimensional structure of a binding domain of a mannosidase II that associates with an inhibitor of a mannosidase II is provided comprising at least two or three atomic contacts of the atomic interactions in Table 4, each atomic interaction defined therein by an atomic contact (more preferably, a specific atom where indicated) on the inhibitor, and an atomic contact (more preferably, a specific amino acid residue where indicated) on the mannosidase II (i.e. enzyme atomic contact). Preferably, the binding domain is defined by the atoms of the enzyme atomic contacts having the structural coordinates for the atoms listed in Table 1, 2, or 8.

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METHOD OF MAKING A CRYSTAL

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The present invention also provides a method of making a crystal according to the invention. The crystal may be formed from an aqueous solution comprising a purified polypeptide comprising a mannosidase II or part or fragment thereof (e.g. a catalytic portion, ligand

binding domain). A method may utilize a purified polypeptide comprising a mannosidase II ligand binding domain to form a crystal

- The term “purified” in reference to a polypeptide, does not require absolute purity such as a homogenous preparation rather it represents an indication that the polypeptide is relatively purer than in the natural environment. Generally, a purified polypeptide is substantially free of other proteins, lipids, carbohydrates, or other materials with which it is naturally associated, preferably at a functionally significant level for example at least 85% pure, more preferably at least 95% pure, most preferably at least 99% pure. A skilled artisan can purify a polypeptide comprising a mannosidase II using standard techniques for protein purification. A substantially pure polypeptide comprising a mannosidase II will yield a single major band on a non-reducing polyacrylamide gel. The purity of the mannosidase II can also be determined by amino-terminal amino acid sequence analysis.
- A polypeptide used in the method may be chemically synthesized in whole or in part using techniques that are well-known in the art. Alternatively, methods are well known to the skilled artisan to construct expression vectors containing the native or mutated mannosidase II coding sequence and appropriate transcriptional/translational control signals. These methods include *in vitro* recombinant DNA techniques, synthetic techniques, and *in vivo* recombination/genetic recombination. See for example the techniques described in Sambrook et al. (Molecular Cloning: A Laboratory Manual, 2nd Edition, Cold Spring Harbor Laboratory press (1989)), and other laboratory textbooks. (See also Sarker et al, Glycoconjugate J. 7:380, 1990; Sarker et al, Proc. Natl. Acad. Sci. USA 88:234-238, 1991, Sarker et al, Glycoconjugate J. 11: 204-209, 1994; Hull et al, Biochem Biophys Res Commun 176:608, 1991 and Pownall et al, Genomics 12:699-704, 1992).

Crystals may be grown from an aqueous solution containing the purified mannosidase II polypeptide by a variety of conventional processes. These processes include batch, liquid, bridge, dialysis, vapor diffusion, and hanging drop methods. (See for example, McPherson, 1982 John Wiley, New York; McPherson, 1990, Eur. J. Biochem. 189: 1-23; Webber. 1991,

Adv. Protein Chem. 41:1-36). Generally, the native crystals of the invention are grown by adding precipitants to the concentrated solution of the mannosidase II polypeptide. The precipitants are added at a concentration just below that necessary to precipitate the protein. Water is removed by controlled evaporation to produce precipitating conditions, which are maintained until crystal growth ceases.

Derivative crystals of the invention can be obtained by soaking native crystals in a solution containing salts of heavy metal atoms. A complex of the invention can be obtained by soaking a native crystal in a solution containing a compound that binds the polypeptide, or they can be obtained by co-crystallizing the polypeptide in the presence of one or more compounds. In order to obtain co-crystals with a compound which binds deep within the tertiary structure of the polypeptide it is necessary to use the second method.

Once the crystal is grown it can be placed in a glass capillary tube and mounted onto a holding device connected to an X-ray generator and an X-ray detection device. Collection of X-ray diffraction patterns are well documented by those skilled in the art (See for example, Ducruix and Geige, 1992, IRL Press, Oxford, England). A beam of X-rays enter the crystal and diffract from the crystal. An X-ray detection device can be utilized to record the diffraction patterns emanating from the crystal. Suitable devices include the Marr 345 imaging plate detector system with an RU200 rotating anode generator.

Methods for obtaining the three dimensional structure of the crystalline form of a molecule or complex are described herein and known to those skilled in the art (see Ducruix and Geige 1992, IRL Press, Oxford, England). Generally, the x-ray crystal structure is given by the diffraction patterns. Each diffraction pattern reflection is characterized as a vector and the data collected at this stage determines the amplitude of each vector. The phases of the vectors may be determined by the isomorphous replacement method where heavy atoms soaked into the crystal are used as reference points in the X-ray analysis (see for example, Otwinowski, 1991, Daresbury, United Kingdom, 80-86). The phases of the vectors may also be determined by molecular replacement (see for example, Naraza, 1994, Proteins 11:281-296). The

amplitudes and phases of vectors from the crystalline form of a mannosidase II determined in accordance with these methods can be used to analyze other related crystalline polypeptides.

The unit cell dimensions and symmetry, and vector amplitude and phase information can be used in a Fourier transform function to calculate the electron density in the unit cell i.e. to generate an experimental electron density map. This may be accomplished using the PHASES package (Furey, 1990). Amino acid sequence structures are fit to the experimental electron density map (i.e. model building) using computer programs (e.g. Jones, T.A. et al, Acta Crystallogr A47, 100-119, 1991). This structure can also be used to calculate a theoretical electron density map. The theoretical and experimental electron density maps can be compared and the agreement between the maps can be described by a parameter referred to as R-factor. A high degree of overlap in the maps is represented by a low value R-factor. The R-factor can be minimized by using computer programs that refine the structure to achieve agreement between the theoretical and observed electron density map. For example, the XPLOR program, developed by Brunger (1992, Nature 355:472-475) can be used for model refinement.

A three dimensional structure of a molecule or complex may be described by atoms that fit the theoretical electron density characterized by a minimum R value. Files can be created for the structure that defines each atom by coordinates in three dimensions.

MODEL

A crystal structure of the present invention may be used to make a model of the mannosidase II or a part thereof, (e.g. a ligand-binding domain). A model may, for example, be a structural model (or a representation thereof), or a computer model. A model may represent the secondary, tertiary and/or quaternary structure of the mannosidase II. The model itself may be in two or three dimensions. It is possible for a computer model to be in three dimensions despite the constraints imposed by a conventional computer screen, if it is possible to scroll along at least a pair of axes, causing "rotation" of the image.

Thus, for example, the structural coordinates provided in the crystal structure and/or model structure may comprise the amino acid residues of the mannosidase II LBD, or a portion of the mannosidase II LBD or a homologue thereof useful in the modelling and design of test compounds capable of binding to the mannosidase II LBD.

As used herein, the term "modelling" includes the quantitative and qualitative analysis of molecular structure and/or function based on atomic structural information and interaction models. The term "modelling" includes conventional numeric-based molecular dynamic and energy minimization models, interactive computer graphic models, modified molecular mechanics models, distance geometry and other structure-based constraint models.

Preferably, modelling is performed using a computer and may be further optimized using known methods. This is called modelling optimisation.

Overlays and super positioning with a three dimensional model of the mannosidase II LBD, and/or a portion thereof, can also be used for modelling optimisation. Additionally, alignment and/or modelling can be used as a guide for the placement of mutations on the mannosidase II LBD surface to characterise the nature of the site in the context of a cell.

The three dimensional structure of a new crystal may be modelled using molecular replacement. The term "molecular replacement" refers to a method that involves generating a preliminary model of a molecule or complex whose structural coordinates are unknown, by orienting and positioning a molecule whose structural coordinates are known within the unit cell of the unknown crystal, so as best to account for the observed diffraction pattern of the unknown crystal. Phases can then be calculated from this model and combined with the observed amplitudes to give an approximate Fourier synthesis of the structure whose coordinates are unknown. This, in turn, can be subject to any of the several forms of refinement to provide a final, accurate structure of the unknown crystal. Lattman, E., "Use of the Rotation and Translation Functions", in *Methods in Enzymology*, 115, pp. 55-77 (1985);

M. G. Rossmann, ed., "The Molecular Replacement Method", Int. Sci. Rev. Ser., No. 13, Gordon & Breach, New York, (1972).

Commonly used computer software packages for molecular replacement are X-PLOR
5 (Brunger 1992, Nature 355: 472-475), AMoRE (Navaza, 1994, Acta Crystallogr. A50:157-
163), the CCP4 package (Collaborative Computational Project, Number 4, "The CCP4 Suite:
Programs for Protein Crystallography", Acta Cryst., Vol. D50, pp. 760-763, 1994), the
MERLOT package (P.M.D. Fitzgerald, J. Appl. Cryst., Vol. 21, pp. 273-278, 1988) and
XTALVIEW (McCree et al (1992) J. Mol. Graphics 10: 44-46. It is preferable that the
10 resulting structure not exhibit a root-mean-square deviation of more than 3 Å.

The quality of the model may be analysed using a program such as PROCHECK or 3D-
Profiler [Laskowski et al 1993 J. Appl. Cryst. 26:283-291; Luthy R. et al, Nature 356: 83-85,
1992; and Bowie, J.U. et al, Science 253: 164-170, 1991]. Once any irregularities have been
15 resolved, the entire structure may be further refined.

Other molecular modelling techniques may also be employed in accordance with this
invention. See, e.g., Cohen, N. C. *et al*, "Molecular Modelling Software and Methods for
Medicinal Chemistry", J. Med. Chem., 33, pp. 883-894 (1990). See also, Navia, M. A. and M.
20 A. Murcko, "The Use of Structural Information in Drug Design", Current Opinions in
Structural Biology, 2, pp. 202-210 (1992).

Using the structural coordinates of the crystal complexes provided by this invention,
molecular modelling may be used to determine the structure coordinates of a crystalline
25 mutant or homologue of mannosidase II LBD or of a related protein. By the same token, a
crystal of the second aspect of the invention can be used to provide a model of swainsonine.
Modelling techniques can then be used to approximate the three dimensional structure of
swainsonine derivatives and other compounds which may be able to mimic the atomic
contacts between swainsonine and the LBD.

COMPUTER FORMAT OF CRYSTALS/MODELS

Information derivable from the crystal of the present invention (for example the structural
 5 coordinates) and/or a model of the present invention may be provided in a computer-readable
 format.

Therefore, the invention provides a computer readable medium or a machine readable storage
 medium which comprises the structural coordinates of a mannosidase II including all or any
 10 parts of the mannosidase II (e.g ligand-binding domain), ligands including portions thereof, or
 substrates including portions thereof. Such storage medium or storage medium encoded with
 these data are capable of displaying on a computer screen or similar viewing device, a three-
 dimensional graphical representation of a molecule or molecular complex which comprises
 the enzyme or ligand binding domains or similarly shaped homologous enzymes or ligand
 15 binding domains. Thus, the invention also provides computerized representations of a crystal
 of the invention, including any electronic, magnetic, or electromagnetic storage forms of the
 data needed to define the structures such that the data will be computer readable for purposes
 of display and/or manipulation.

20 In an aspect the invention provides a computer for producing a three-dimensional
 representation of a molecule or molecular complex, wherein said molecule or molecular
 complex comprises a mannosidase II or ligand binding domain thereof defined by structural
 coordinates of mannosidase II amino acids or a ligand binding domain thereof, or comprises
 structural coordinates of atoms of a ligand or substrate, or a three-dimensional representation
 25 of a homologue of said molecule or molecular complex, wherein said computer comprises:

- (a) a machine-readable data storage medium comprising a data storage material encoded
 with machine readable data wherein said data comprises the structural coordinates of a
 mannosidase II amino acids according to Table 1, 2, or 8 or a ligand binding domain
 thereof, or a ligand (e.g. swainsonine) according to Table 2, or Table 8;
- 30 (b) a working memory for storing instructions for processing said machine-readable data;

- (c) a central-processing unit coupled to said working memory and to said machine-readable data storage medium for processing said machine readable data into said three-dimensional representation; and
- (d) a display coupled to said central-processing unit for displaying said three-dimensional representation.

A homologue may comprise a mannosidase II or ligand binding domain thereof, or ligand or substrate that has a root mean square deviation from the backbone atoms of not more than 1.5 angstroms.

The invention also provides a computer for determining at least a portion of the structural coordinates corresponding to an X-ray diffraction pattern of a molecule or molecular complex wherein said computer comprises:

- (a) a machine-readable data storage medium comprising a data storage material encoded with machine readable data wherein said data comprises the structural coordinates according to Table 1, 2, or 8;
- (b) a machine-readable data storage medium comprising a data storage material encoded with machine readable data wherein said data comprises an X-ray diffraction pattern of said molecule or molecular complex;
- (c) a working memory for storing instructions for processing said machine-readable data of (a) and (b);
- (d) a central-processing unit coupled to said working memory and to said machine-readable data storage medium of (a) and (b) for performing a Fourier transform of the machine readable data of (a) and for processing said machine readable data of (b) into structural coordinates; and
- (e) a display coupled to said central-processing unit for displaying said structural coordinates of said molecule or molecular complex.

STRUCTURAL DETERMINATIONS

The present invention also provides a method for determining the secondary and/or tertiary structures of a polypeptide by using a crystal, or a model according to the present invention.

- 5 The polypeptide may be any polypeptide for which the secondary and or tertiary structure is uncharacterised or incompletely characterised. In a preferred embodiment the polypeptide shares (or is predicted to share) some structural or functional homology to the mannosidase II crystal. For example, the polypeptide may show a degree of structural homology over some or all parts of the primary amino acid sequence. For example the polypeptide may have one or
- 10 more domains which shows homology with a mannosidase II domain (Kapitonov and Yu (1999) *Glycobiology* 9(10): 961-978).

The polypeptide may be a mannosidase II with a different specificity for a ligand or substrate.

The polypeptide may be a mannosidase II which requires a different metal cofactor.

- 15 Alternatively (or in addition) the polypeptide may be a mannosidase II from a different species.

The polypeptide may be a mutant of the wild-type mannosidase II. A mutant may arise naturally, or may be made artificially (for example using molecular biology techniques). The

20 mutant may also not be “made” at all in the conventional sense, but merely tested theoretically using the model of the present invention. A mutant may or may not be functional.

- Thus, using the model of the present invention, the effect of a particular mutation on the
- 25 overall two and/or three dimensional structure of a mannosidase II and/or the interaction between the enzyme and a ligand or substrate can be investigated. Alternatively, the polypeptide may perform an analogous function or be suspected to show a similar catalytic mechanism to the mannosidase II enzyme. For example the polypeptide may remove, transport, or add on a sugar residue.

The polypeptide may also be the same as the polypeptide of the crystal, but in association with a different ligand (for example, modulator or inhibitor) or cofactor. In this way it is possible to investigate the effect of altering a ligand or compound with which the polypeptide is associated on the structure of the LBD.

5

Secondary or tertiary structure may be determined by applying the structural coordinates of the crystal or model of the present invention to other data such as an amino acid sequence, X-ray crystallographic diffraction data, or nuclear magnetic resonance (NMR) data. Homology modeling, molecular replacement, and nuclear magnetic resonance methods using these other data sets are described below.

10

Homology modeling (also known as comparative modeling or knowledge-based modeling) methods develop a three dimensional model from a polypeptide sequence based on the structures of known proteins (i.e. mannosidase II of the crystal). The method utilizes a computer model of the crystal of the present invention (the "known structure"), a computer representation of the amino acid sequence of the polypeptide with an unknown structure, and standard computer representations of the structures of amino acids. The method in particular comprises the steps of; (a) identifying structurally conserved and variable regions in the known structure; (b) aligning the amino acid sequences of the known structure and unknown structure (c) generating coordinates of main chain atoms and side chain atoms in structurally conserved and variable regions of the unknown structure based on the coordinates of the known structure thereby obtaining a homology model; and (d) refining the homology model to obtain a three dimensional structure for the unknown structure. This method is well known to those skilled in the art (Greer, 1985, *Science* 228, 1055; Bundell et al 1988, *Eur. J. Biochem.* 172, 513; Knighton et al., 1992, *Science* 258:130-135, <http://biochem.vt.edu/courses/modeling/homology.htn>). Computer programs that can be used in homology modeling are Quanta and the Homology module in the Insight II modelling package distributed by Molecular Simulations Inc, or MODELLER (Rockefeller University, www.iucr.ac.uk/sinris-top/logical/prg-modeller.html).

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In step (a) of the homology modeling method, the known mannosidase II structure is examined to identify the structurally conserved regions (SCRs) from which an average structure, or framework, can be constructed for these regions of the protein. Variable regions (VRs), in which known structures may differ in conformation, also must be identified. SCRs
 5 generally correspond to the elements of secondary structure, such as alpha-helices and beta-sheets, and to ligand- and substrate-binding sites (e.g. acceptor and donor binding sites). The VRs usually lie on the surface of the proteins and form the loops where the main chain turns.

Many methods are available for sequence alignment of known structures and unknown
 10 structures. Sequence alignments generally are based on the dynamic programming algorithm of Needleman and Wunsch [J. Mol. Biol. 48: 442-453, 1970]. Current methods include FASTA, Smith-Waterman, and BLASTP, with the BLASTP method differing from the other two in not allowing gaps. Scoring of alignments typically involves construction of a 20x20 matrix in which identical amino acids and those of similar character (i.e., conservative
 15 substitutions) may be scored higher than those of different character. Substitution schemes which may be used to score alignments include the scoring matrices PAM (Dayhoff et al., Meth. Enzymol. 91: 524-545, 1983), and BLOSUM (Henikoff and Henikoff, Proc. Nat. Acad. Sci. USA 89: 10915-'0919, 1992), and the matrices based on alignments derived from three-dimensional structures including that of Johnson and Overington (JO matrices) (J. Mol. Biol.
 20 233: 716-738, 1993).

Alignment based solely on sequence may be used; however, other structural features also may be taken into account. In Quanta, multiple sequence alignment algorithms are available that may be used when aligning a sequence of the unknown with the known structures. Four
 25 scoring systems (i.e. sequence homology, secondary structure homology, residue accessibility homology, CA-CA distance homology) are available, each of which may be evaluated during an alignment so that relative statistical weights may be assigned.

When generating coordinates for the unknown structure, main chain atoms and side chain
 30 atoms, both in SCRs and VRs need to be modeled. A variety of approaches known to those

skilled in the art may be used to assign coordinates to the unknown. In particular, the coordinates of the main chain atoms of SCRs will be transferred to the unknown structure. VRs correspond most often to the loops on the surface of the polypeptide and if a loop in the known structure is a good model for the unknown, then the main chain coordinates of the known structure may be copied. Side chain coordinates of SCRs and VRs are copied if the residue type in the unknown is identical to or very similar to that in the known structure. For other side chain coordinates, a side chain rotamer library may be used to define the side chain coordinates. When a good model for a loop cannot be found fragment databases may be searched for loops in other proteins that may provide a suitable model for the unknown. If desired, the loop may then be subjected to conformational searching to identify low energy conformers if desired.

Once a homology model has been generated it is analyzed to determine its correctness. A computer program available to assist in this analysis is the Protein Health module in Quanta which provides a variety of tests. Other programs that provide structure analysis along with output include PROCHECK and 3D-Profiler [Luthy R. et al, Nature 356: 83-85, 1992; and Bowie, J.U. et al, Science 253: 164-170, 1991]. Once any irregularities have been resolved, the entire structure may be further refined. Refinement may consist of energy minimization with restraints, especially for the SCRs. Restraints may be gradually removed for subsequent minimizations. Molecular dynamics may also be applied in conjunction with energy minimization.

Molecular replacement involves applying a known structure to solve the X-ray crystallographic data set of a polypeptide of unknown structure. The method can be used to define the phases describing the X-ray diffraction data of a polypeptide of unknown structure when only the amplitudes are known. Thus in an embodiment of the invention, a method is provided for determining three dimensional structures of polypeptides with unknown structure by applying the structural coordinates of the crystal of the present invention to provide an X-ray crystallographic data set for a polypeptide of unknown structure, and (b) determining a low energy conformation of the resulting structure.

Molecular replacement computer programs generally involve the following steps: (1) determining the number of molecules in the unit cell and defining the angles between them (self rotation function); (2) rotating the known structure against diffraction data to define the orientation of the molecules in the unit cell (rotation function); (3) translating the known structure in three dimensions to correctly position the molecules in the unit cell (translation function); (4) determining the phases of the X-ray diffraction data and calculating an R-factor calculated from the reference data set and from the new data wherein an R-factor between 30-50% indicates that the orientations of the atoms in the unit cell have been reasonably determined by the method; and (5) optionally, decreasing the R-factor to about 20% by refining the new electron density map using iterative refinement techniques known to those skilled in the art (refinement).

In an embodiment of the invention, a method is provided for determining three dimensional structures of polypeptides with unknown structure (e.g. additional native or mutated mannosidase II enzymes) by applying the structural coordinates of a mannosidase II structure to provide an X-ray crystallographic data set for a polypeptide of unknown structure, and (b) determining a low energy conformation of the resulting structure.

The structural coordinates of the crystal of the present invention may be applied to nuclear magnetic resonance (NMR) data to determine the three dimensional structures of polypeptides with uncharacterised or incompletely characterised structure. (See for example, Wuthrich, 1986, John Wiley and Sons, New York: 176-199; Pflugrath et al., 1986, J. Molecular Biology 189: 383-386; Kline et al., 1986 J. Molecular Biology 189:377-382). While the secondary structure of a polypeptide may often be determined by NMR data, the spatial connections between individual pieces of secondary structure are not as readily determined. The structural coordinates of a polypeptide defined by X-ray crystallography can guide the NMR spectroscopist to an understanding of the spatial interactions between secondary structural elements in a polypeptide of related structure. Information on spatial interactions between secondary structural elements can greatly simplify Nuclear Overhauser Effect (NOE) data

from two-dimensional NMR experiments. In addition, applying the structural coordinates after the determination of secondary structure by NMR techniques simplifies the assignment of NOE's relating to particular amino acids in the polypeptide sequence and does not greatly bias the NMR analysis of polypeptide structure.

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In an embodiment, the invention relates to a method of determining three dimensional structures of polypeptides with unknown structures, by applying the structural coordinates of a crystal of the present invention to nuclear magnetic resonance (NMR) data of the unknown structure. This method comprises the steps of: (a) determining the secondary structure of an
10 unknown structure using NMR data; and (b) simplifying the assignment of through-space interactions of amino acids. The term "through-space interactions" defines the orientation of the secondary structural elements in the three dimensional structure and the distances between amino acids from different portions of the amino acid sequence. The term "assignment" defines a method of analyzing NMR data and identifying which amino acids give rise to
15 signals in the NMR spectrum.

SCREENING METHOD

The present invention also provides a method of screening for a ligand that associates with a
20 ligand binding domain and/or modulates the function of mannosidase II, by using a crystal or a model according to the present invention. The method may involve investigating whether a test compound is capable of associating with or binding a ligand binding domain.

In accordance with an aspect of the present invention, a method is provided for screening for
25 a ligand capable of binding to a ligand binding domain, wherein said method comprises the use of a crystal or model according to the invention.

In another aspect, the invention relates to a method of screening for a ligand capable of binding to a ligand binding domain, wherein the ligand binding domain is defined by the
30 amino acid residue structural coordinates given herein, the method comprising contacting the

ligand binding domain with a test compound and determining if said test compound binds to said ligand binding domain.

5 In one embodiment, the present invention provides a method of screening for a test compound capable of interacting with a key amino acid residue of the ligand binding domain of mannosidase II.

Another aspect of the invention provides a process comprising the steps of:

- 10 (a) performing the method of screening for a ligand as described above;
(b) identifying one or more ligands capable of binding to a ligand binding domain; and
(c) preparing a quantity of said one or more ligands.

A further aspect of the invention provides a process comprising the steps of:

- 15 (a) performing the method of screening for a ligand as described above;
(b) identifying one or more ligands capable of binding to a ligand binding domain; and
(c) preparing a pharmaceutical composition comprising said one or more ligands.

20 Once a test compound capable of interacting with a key amino acid residue in a mannosidase II LBD has been identified, further steps may be carried out either to select and/or to modify compounds and/or to modify existing compounds, to modulate the interaction with the key amino acid residues in the mannosidase II LBD.

Yet another aspect of the invention provides a process comprising the steps of:

- 25 (a) performing the method of screening for a ligand as described above;
(b) identifying one or more ligands capable of binding to a ligand binding domain;
(c) modifying said one or more ligands capable of binding to a ligand binding domain;
(d) performing said method of screening for a ligand as described above;
30 (e) optionally preparing a pharmaceutical composition comprising said one or more ligands.

As used herein, the term “test compound” means any compound which is potentially capable of associating with a ligand binding domain. If, after testing, it is determined that the test compound does bind to the LBD, it is known as a “ligand”.

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A “test compound” includes, but is not limited to, a compound which may be obtainable from or produced by any suitable source, whether natural or not. The test compound may be designed or obtained from a library of compounds which may comprise peptides, as well as other compounds, such as small organic molecules and particularly new lead compounds. By way of example, the test compound may be a natural substance, a biological macromolecule, or an extract made from biological materials such as bacteria, fungi, or animal (particularly mammalian) cells or tissues, an organic or an inorganic molecule, a synthetic test compound, a semi-synthetic test compound, a carbohydrate, a monosaccharide, an oligosaccharide or polysaccharide, a glycolipid, a glycopeptide, a saponin, a heterocyclic compound, a structural or functional mimetic, a peptide, a peptidomimetic, a derivatised test compound, a peptide cleaved from a whole protein, or a peptides synthesised synthetically (such as, by way of example, either using a peptide synthesizer or by recombinant techniques or combinations thereof), a recombinant test compound, a natural or a non-natural test compound, a fusion protein or equivalent thereof and mutants, derivatives or combinations thereof.

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The test compound may be screened as part of a library or a data base of molecules. Data bases which may be used include ACD (Molecular Designs Limited), NCI (National Cancer Institute), CCDC (Cambridge Crystallographic Data Center), CAST (Chemical Abstract Service), Derwent (Derwent Information Limited), Maybridge (Maybridge Chemical Company Ltd), Aldrich (Aldrich Chemical Company), DOCK (University of California in San Francisco), and the Directory of Natural Products (Chapman & Hall). Computer programs such as CONCORD (Tripos Associates) or DB-Converter (Molecular Simulations Limited) can be used to convert a data set represented in two dimensions to one represented in three dimensions.

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Test compounds may be tested for their capacity to fit spatially into a mannosidase II LBD. As used herein, the term “fits spatially” means that the three-dimensional structure of the test compound is accommodated geometrically in a cavity or pocket of the mannosidase II LBD. The test compound can then be considered to be a ligand.

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A favourable geometric fit occurs when the surface areas of the test compound is in close proximity with the surface area of the cavity or pocket without forming unfavorable interactions. A favourable complementary interaction occurs where the test compound interacts by hydrophobic, aromatic, ionic, dipolar, or hydrogen donating and accepting forces.

10 Unfavourable interactions may be steric hindrance between atoms in the test compound and atoms in the binding site.

If a model of the present invention is a computer model, the test compounds may be positioned in an LBD through computational docking. If, on the other hand, the model of the
15 present invention is a structural model, the test compounds may be positioned in the LBD by, for example, manual docking.

As used herein the term “docking” refers to a process of placing a compound in close proximity with a mannosidase II LBD, or a process of finding low energy conformations of a
20 test compound/glycosyltransferase complex.

A screening method of the present invention may comprise the following steps:

- (i) generating a computer model of a mannosidase II or a selected site thereof using a crystal according to the first aspect of the invention;
- 25 (ii) docking a computer representation of a test compound with the computer model;
- (iii) analysing the fit of the compound in the mannosidase II or selected site.

In an aspect of the invention a method is provided comprising the following steps:

- 5 (a) docking a computer representation of a structure of a test compound into a computer representation of a binding domain of a mannosidase II defined in accordance with the invention using a computer program, or by interactively moving the representation of the test compound into the representation of the binding domain;
- (b) characterizing the geometry and the complementary interactions formed between the atoms of the binding domain and the compound; optionally
- 10 (c) searching libraries for molecular fragments which can fit into the empty space between the compound and binding domain and can be linked to the compound; and
- (d) linking the fragments found in (c) to the compound and evaluating the new modified compound.

In an embodiment of the invention a method is provided which comprises the following steps:

- 15 (a) docking a computer representation of a test compound from a computer data base with a computer representation of a selected site (e.g. the inhibitor binding domain) on a mannosidase II structure defined in accordance with the invention to obtain a complex;
- (b) determining a conformation of the complex with a favourable geometric fit and
- 20 favourable complementary interactions; and
- (c) identifying test compounds that best fit the selected site as potential modulators of the mannosidase II.

25 A method of the invention may be applied to a plurality of test compounds, to identify those that best fit the selected site.

The model used in the screening method may comprise the ligand-binding domain of a mannosidase II enzyme either alone or in association with one or more ligands and/or cofactors. For example, the model may comprise the ligand-binding domain in association

30 with a substrate or analogue thereof.

If the model comprises an unassociated ligand binding domain, then the selected site under investigation may be the LBD itself. The test compound may, for example, mimic a known substrate for the enzyme in order to interact with the LBD. The selected site may alternatively be another site on the enzyme.

If the model comprises an associated LBD, for example an LBD in association with a substrate molecule or analogue thereof, the selected site may be the LBD or a site made up of the LBD and the complexed ligand, or a site on the ligand itself. The test compound may be investigated for its capacity to modulate the interaction with the associated molecule.

A test compound (or plurality of test compounds) may be selected on the basis of its similarity to a known ligand for the mannosidase II. For example, the screening method may comprise the following steps:

- (i) generating a computer model of the LBD of a mannosidase II in complex with a ligand;
- (ii) searching for a test compound with a similar three dimensional structure and/or similar chemical groups; and
- (iii) evaluating the fit of the test compound in the LBD.

Searching may be carried out using a database of computer representations of potential compounds, using methods known in the art.

The present invention also provides a method for designing ligands for a mannosidase II. It is well known in the art to use a screening method as described above to identify a test compound with promising fit, but then to use this test compound as a starting point to design a ligand with improved fit to the model. A known modulator can also be modified to enhance its fit with a model of the invention. Such techniques are known as "structure-based ligand design" (See Kuntz et al., 1994, Acc. Chem. Res. 27:117; Guida, 1994, Current Opinion in Struc. Biol. 4: 777; and Colman, 1994, Current Opinion in Struc. Biol. 4: 868, for reviews of

structure-based drug design and identification; and Kuntz et al 1982, J. Mol. Biol. 162:269; Kuntz et al., 1994, Acc. Chem. Res. 27: 117; Meng et al., 1992, J. Compt. Chem. 13: 505; Bohm, 1994, J. Comp. Aided Molec. Design 8: 623 for methods of structure-based modulator design).

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Examples of computer programs that may be used for structure-based ligand design are CAVEAT (Bartlett et al., 1989, in "Chemical and Biological Problems in Molecular Recognition", Roberts, S.M. Ley, S.V.; Campbell, N.M. eds; Royal Society of Chemistry: Cambridge, pp 182-196); FLOG (Miller et al., 1994, J. Comp. Aided Molec. Design 8:153);

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PRO Modulator (Clark et al., 1995 J. Comp. Aided Molec. Design 9:13); MCSS (Miranker and Karplus, 1991, Proteins: Structure, Function, and Genetics 8:195); and, GRID (Goodford, 1985, J. Med. Chem. 28:849).

The method may comprise the following steps:

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- (i) docking a model of a test compound with a model of a selected site;
- (ii) identifying one or more groups on the test compound which may be modified to improve their fit in the selected site;
- (iii) replacing one or more identified groups to produce a modified test compound model; and

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- (iv) docking the modified test compound model with the model of the selected site.

Evaluation of fit may comprise the following steps:

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- (a) mapping chemical features of a test compound such as by hydrogen bond donors or acceptors, hydrophobic/lipophilic sites, positively ionizable sites, or negatively ionizable sites; and
- (b) adding geometric constraints to selected mapped features.

The fit of the modified test compound may then be evaluated using the same criteria.

The chemical modification of a group may either enhance or reduce hydrogen bonding interaction, charge interaction, hydrophobic interaction, Van Der Waals interaction or dipole interaction between the test compound and the key amino acid residue(s) of the selected site. Preferably the group modifications involve the addition, removal, or replacement of substituents onto the test compound such that the substituents are positioned to collide or to bind preferentially with one or more amino acid residues that correspond to the key amino acid residues of the selected site.

Identified groups in a test compound may be substituted with, for example, alkyl, alkoxy, hydroxyl, aryl, cycloalkyl, alkenyl, alkynyl, thiol, thioalkyl, thioaryl, amino, or halo groups. Generally, initial substitutions are conservative, i.e., the replacement group will have approximately the same size, shape, hydrophobicity and charge as the original group. It should, of course, be understood that components known in the art to alter conformation should be avoided.

If a modified test compound model has an improved fit, then it may bind to the selected site and be considered to be a "ligand". Rational modification of groups may be made with the aid of libraries of molecular fragments which may be screened for their capacity to fit into the available space and to interact with the appropriate atoms. Databases of computer representations of libraries of chemical groups are available commercially, for this purpose.

A test compound may also be modified "*in situ*" (i.e. once docked into the potential binding site), enabling immediate evaluation of the effect of replacing selected groups. The computer representation of the test compound may be modified by deleting a chemical group or groups, replacing chemical groups, or by adding a chemical group or groups. After each modification to a compound, the atoms of the modified compound and potential binding site can be shifted in conformation and the distance between the modulator and the active site atoms may be scored on the basis of geometric fit and favourable complementary interactions between the molecules. This technique is described in detail in Molecular Simulations User Manual, 1995 in LUDI.

Examples of ligand building and/or searching computer include programs in the Molecular Simulations Package (Catalyst), ISIS/HOST, ISIS/BASE, and ISIS/DRAW (Molecular Designs Limited), and UNITY (Tripos Associates).

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The “starting point” for rational ligand design may be a known ligand for the enzyme. For example, in order to identify potential modulators of the mannosidase II, a logical approach would be to start with a known ligand (for example a substrate molecule or inhibitor) to produce a molecule which mimics the binding of the ligand. Such a molecule may, for example, act as a competitive inhibitor for the true ligand, or may bind so strongly that the interaction (and inhibition) is effectively irreversible.

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Such a method may comprise the following steps:

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- (i) generating a computer model of a LBD of a mannosidase II in complex with a ligand;
- (ii) replacing one or more groups on the ligand model to produce a modified ligand; and
- (iii) evaluating the fit of the modified ligand in the LBD.

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The replacement groups could be selected and replaced using a compound construction program which replaces computer representations of chemical groups with groups from a computer database, where the representations of the compounds are defined by structural coordinates.

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In an embodiment, a screening method is provided for identifying a ligand of a mannosidase II comprising the step of using the structural coordinates of a substrate molecule or swainsonine or component thereof, defined in relation to its spatial association with a mannosidase II structure or a ligand binding domain of the invention, to generate a compound that is capable of associating with the mannosidase II or ligand binding domain.

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In an embodiment of the invention, a screening method is provided for identifying a ligand of a mannosidase II comprising the step of using the structural coordinates of swainsonine listed in Table 2 or 8 to generate a compound for associating with a ligand binding domain of a mannosidase II as described herein. The following steps are employed in a particular method of the invention: (a) generating a computer representation of swainsonine, defined by its structural coordinates listed in Table 2 or 8; (b) searching for molecules in a data base that are structurally or chemically similar to the defined swainsonine, using a searching computer program, or replacing portions of the compound with similar chemical structures from a database using a compound building computer program.

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The screening methods of the present invention may be used to identify compounds or entities that associate with a molecule that associates with a mannosidase II enzyme (for example, a substrate molecule).

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Compounds and entities (e.g. ligands) of mannosidase II identified using the above-described methods may be prepared using methods described in standard reference sources utilized by those skilled in the art. For example, organic compounds may be prepared by organic synthetic methods described in references such as March, 1994, Advanced Organic Chemistry: Reactions, Mechanisms, and Structure, New York, McGraw Hill.

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Test compounds and ligands which are identified using a crystal or model of the present invention can be screened in assays such as those well known in the art. Screening can be, for example, *in vitro*, in cell culture, and/or *in vivo*. Biological screening assays preferably centre on activity-based response models, binding assays (which measure how well a compound binds to the receptor), and bacterial, yeast and animal cell lines (which measure the biological effect of a compound in a cell). The assays can be automated for high capacity-high throughput screening (HTS) in which large numbers of compounds can be tested to identify compounds with the desired activity. The biological assay, may also be an assay for the ligand binding activity of a compound that selectively binds to the LBD compared to other nuclear receptors.

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LIGANDS/COMPOUNDS/MODULATORS

The present invention provides a ligand or compound or entity identified by a screening method of the present invention. A ligand or compound may have been designed rationally by using a model according to the present invention. A ligand or compound identified using the screening methods of the invention specifically associate with a target compound. In the present invention the target compound may be the mannosidase II enzyme or a molecule that is capable of associating with the mannosidase II enzyme (for example a substrate molecule). In a preferred embodiment the ligand is capable of binding to the LBD of a mannosidase II.

A ligand or compound identified using a screening method of the invention may act as a "modulator", i.e. a compound which affects the activity of a mannosidase II. A modulator may reduce, enhance or alter the biological function of a mannosidase II. For example a modulator may modulate the capacity of the enzyme to hydrolyse mannose residues. An alteration in biological function may be characterised by a change in specificity. For example, a modulator may cause the enzyme to accept a different substrate molecule, to transfer a different sugar, or to work with a different metal cofactor. In order to exert its function, the modulator commonly binds to the ligand binding domain.

A "modulator" which is capable of reducing the biological function of the enzyme may also be known as an inhibitor. Preferably an inhibitor reduces or blocks the capacity of the enzyme to hydrolyse mannose residues. The inhibitor may mimic the binding of a substrate molecule, for example, it may be a substrate analogue. A substrate analogue may be designed by considering the interactions between the substrate molecule and the enzyme (for example by using information derivable from the crystal of the invention) and specifically altering one or more groups (as described above).

In a highly preferred embodiment, a modulator acts as an inhibitor of the mannosidase II and is capable of inhibiting N-glycan biosynthesis. In another embodiment, a modulator enhances mannosidase II activity and is capable of regulating the immune system.

The present invention also provides a method for modulating the activity of a mannosidase II within a cell using a modulator according to the present invention. It would be possible to monitor the expression of N-glycans on the cell surface following such treatment by a number of methods known in the art (for example by detecting expression with an N-glycan specific antibody).

In another preferred embodiment, the modulator modulates the catalytic mechanism of the enzyme.

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A modulator may be an agonist, partial agonist, partial inverse agonist or antagonist of the mannosidase II.

As used herein, the term “agonist” means any ligand, which is capable of binding to a ligand binding domain and which is capable of increasing a proportion of the enzyme that is in an active form, resulting in an increased biological response. The term includes partial agonists and inverse agonists.

As used herein, the term “partial agonist” means an agonist that is unable to evoke the maximal response of a biological system, even at a concentration sufficient to saturate the specific receptors.

As used herein, the term “partial inverse agonist” is an inverse agonist that evokes a submaximal response to a biological system, even at a concentration sufficient to saturate the specific receptors. At high concentrations, it will diminish the actions of a full inverse agonist.

The invention relates to a mannosidase II ligand binding domain antagonist, wherein said ligand binding domain is that defined by the amino acid structural coordinates described herein. For example the ligand may antagonise the inhibition of mannosidase by swainsonine.

As used herein, the term “antagonist” means any agent that reduces the action of another agent, such as an agonist. The antagonist may act at the same site as the agonist (competitive antagonism). The antagonistic action may result from a combination of the substance being antagonised (chemical antagonism) or the production of an opposite effect through a different receptor (functional antagonism or physiological antagonism) or as a consequence of competition for the binding site of an intermediate that links receptor activation to the effect observed (indirect antagonism).

As used herein, the term “competitive antagonism” refers to the competition between an agonist and an antagonist for a receptor that occurs when the binding of agonist and antagonist becomes mutually exclusive. This may be because the agonist and antagonist compete for the same binding site or combine with adjacent but overlapping sites. A third possibility is that different sites are involved but that they influence the receptor macromolecules in such a way that agonist and antagonist molecules cannot be bound at the same time. If the agonist and antagonist form only short lived combinations with the receptor so that equilibrium between agonist, antagonist and receptor is reached during the presence of the agonist, the antagonism will be surmountable over a wide range of concentrations. In contrast, some antagonists, when in close enough proximity to their binding site, may form a stable covalent bond with it and the antagonism becomes insurmountable when no spare receptors remain.

As mentioned above, an identified ligand or compound may act as a ligand model (for example, a template) for the development of other compounds. A modulator may be a mimetic of a ligand or ligand binding domain. A mimetic of a ligand may compete with a natural ligand for a mannosidase II and antagonize a physiological effect of the enzyme in an animal. A mimetic of a ligand may be an organically synthesized compound. A mimetic of a ligand binding domain, may be either a peptide or other biopharmaceutical (such as an organically synthesized compound) that specifically binds to a natural substrate molecule for a mannosidase II and antagonize a physiological effect of the enzyme in an animal.

A modulator may be one or a variety of different sorts of molecule. For example, a modulator may be a peptide, member of random peptide libraries and combinatorial chemistry-derived molecular libraries, phosphopeptide (including members of random or partially degenerate, directed phosphopeptide libraries), a carbohydrate, a monosaccharide, an oligosaccharide or polysaccharide, a glycolipid, a glycopeptide, a saponin, a heterocyclic compound antibody, carbohydrate, nucleoside or nucleotide or part thereof, and small organic or inorganic molecule. A modulator may be an endogenous physiological compound, or it may be a natural or synthetic compound. The modulators of the present invention may be natural or synthetic.

10 The term "modulator" also refers to a chemically modified ligand or compound, and includes isomers and racemic forms.

Once a ligand has been optimally selected or designed, substitutions may then be made in some of its atoms or side groups in order to improve or modify its binding properties.

15 Generally, initial substitutions are conservative, i.e., the replacement group will have approximately the same size, shape, hydrophobicity and charge as the original group. It should, of course, be understood that components known in the art to alter conformation should be avoided. Such substituted chemical compounds may then be analyzed for efficiency of fit to the mannosidase II LBD by the same computer methods described above.

20 Preferably, positions for substitution are selected based on the predicted binding orientation of a ligand to the mannosidase II LBD.

A technique suitable for preparing a modulator will depend on its chemical nature. For example, organic compounds may be prepared by organic synthetic methods described in references such as March, 1994, Advanced Organic Chemistry: Reactions, Mechanisms, and Structure, New York, McGraw Hill. Peptides can be synthesized by solid phase techniques (Roberge JY *et al* (1995) Science 269: 202-204) and automated synthesis may be achieved, for example, using the ABI 431 A Peptide Synthesizer (Perkin Elmer) in accordance with the instructions provided by the manufacturer. Once cleaved from the resin, the peptide may be

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purified by preparative high performance liquid chromatography (e.g., Creighton (1983) *Proteins Structures and Molecular Principles*, WH Freeman and Co, New York NY). The composition of the synthetic peptides may be confirmed by amino acid analysis or sequencing (e.g., the Edman degradation procedure; Creighton, *supra*).

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If a modulator is a nucleotide, or a polypeptide expressable therefrom, it may be synthesized, in whole or in part, using chemical methods well known in the art (see Caruthers MH *et al* (1980) *Nuc Acids Res Symp Ser* 215-23, Horn T *et al* (1980) *Nuc Acids Res Symp Ser* 225-232), or it may be prepared using recombinant techniques well known in the art.

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Direct synthesis of a ligand or mimetics thereof can be performed using various solid-phase techniques (Roberge JY *et al* (1995) *Science* 269: 202-204) and automated synthesis may be achieved, for example, using the ABI 431A Peptide Synthesizer (Perkin Elmer) in accordance with the instructions provided by the manufacturer. Additionally, the amino acid sequences obtainable from the ligand, or any part thereof, may be altered during direct synthesis and/or combined using chemical methods with a sequence from other subunits, or any part thereof, to produce a variant ligand.

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In an alternative embodiment of the invention, the coding sequence of a ligand or mimetics thereof may be synthesized, in whole or in part, using chemical methods well known in the art (see Caruthers MH *et al* (1980) *Nuc Acids Res Symp Ser* 215-23, Horn T *et al* (1980) *Nuc Acids Res Symp Ser* 225-232).

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A wide variety of host cells can be employed for expression of the nucleotide sequences encoding a ligand of the present invention. These cells may be both prokaryotic and eukaryotic host cells. Suitable host cells include bacteria such as *E. coli*, yeast, filamentous fungi, insect cells, mammalian cells, typically immortalized, e.g., mouse, CHO, human and monkey cell lines and derivatives thereof. Preferred host cells are able to process the expression products to produce an appropriate mature polypeptide. Processing includes but is

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not limited to glycosylation, ubiquitination, disulfide bond formation and general post-translational modification.

5 In an embodiment of the present invention, the ligand may be a derivative of, or a chemically modified ligand. The term "derivative" or "derivatised" as used herein includes the chemical modification of a ligand.

10 A chemical modification of a ligand and/or a key amino acid residue of a ligand binding domain of the present invention may either enhance or reduce hydrogen bonding interaction, charge interaction, hydrophobic interaction, Van Der Waals interaction or dipole interaction between the ligand and the key amino acid residue(s) of the mannosidase II LBD. By way of example, steric hinderance is a common means of changing the interaction of the mannosidase II LBD binding domain with the activation domain.

15 Preferably such modifications involve the addition of substituents onto a test compound such that the substituents are positioned to collide or to bind preferentially with one or more amino acid residues that correspond to the key amino acid residues of mannosidase II LBD of the present invention. Typical modifications may include, for example, the replacement of a hydrogen by a halo group, an alkyl group, an acyl group or an amino group.

20 The invention also relates to classes of modulators of mannosidase II based on the structure and shape of a substrate, defined in relation to the substrate's molecule's spatial association with a mannosidase II structure of the invention or part thereof. Therefore, a modulator may comprise a substrate molecule having the shape or structure, preferably the structural coordinates, of a substrate molecule in the active site binding pocket of a reaction catalyzed
25 by a mannosidase II. In an embodiment, the substrate comprises GlcNAcMan₅GlcNAc₂-Asn-

30 A modulator may be an inhibitor of a mannosidase II such as swainsonine or a derivative or mimetic thereof.

A class of modulators of mannosidase II enzymes may comprise a compound containing a structure of swainsonine, and having one or more, preferably all, of the structural coordinates of swainsonine of Table 2 or 8. Functional groups in the swainsonine modulators may be substituted with, for example, alkyl, alkoxy, hydroxyl, aryl, cycloalkyl, alkenyl, alkynyl, thiol, thioalkyl, thioaryl, amino, or halo, or they may be modified using techniques known in the art. Substituents will be selected to optimize the activity of the modulator.

PHARMACEUTICAL COMPOSITION

The present invention also provides the use of a ligand or modulator according to the invention, in the manufacture of a medicament to treat and/or prevent a disease in a mammalian patient. There is also provided a pharmaceutical composition comprising such a ligand or modulator and a method of treating and/or preventing a disease comprising the step of administering such a modulator or pharmaceutical composition to a mammalian patient.

In an embodiment, the invention relates to a pharmaceutical composition which comprises a crystal structure of the invention or a part thereof (e.g. a binding domain), or a modulator of the invention in an amount effective to regulate one or more of the conditions described herein (e.g. tumor growth or metastasis) and a pharmaceutically acceptable carrier, diluent or excipient.

The pharmaceutical compositions may be for human or animal usage in human and veterinary medicine and will typically comprise a pharmaceutically acceptable carrier, diluent, excipient, adjuvant or combination thereof.

Acceptable carriers or diluents for therapeutic use are well known in the pharmaceutical art, and are described, for example, in Remington's Pharmaceutical Sciences, Mack Publishing Co. (A. R. Gennaro edit. 1985). The choice of pharmaceutical carrier, excipient or diluent can be selected with regard to the intended route of administration and standard

pharmaceutical practice. The pharmaceutical compositions may comprise as - or in addition to - the carrier, excipient or diluent any suitable binder(s), lubricant(s), suspending agent(s), coating agent(s), solubilising agent(s).

- 5 A pharmaceutical composition of the invention can be administered to a subject in an appropriate carrier or diluent, co-administered with enzyme inhibitors or in an appropriate carrier such as microporous or solid beads or liposomes. Liposomes include water-in-oil-in-water emulsions as well as conventional liposomes (Strejan et al., (1984) J. Neuroimmunol 7:27).

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Preservatives, stabilizers, dyes and even flavouring agents may be provided in the pharmaceutical composition. Examples of preservatives include sodium benzoate, sorbic acid and esters of p-hydroxybenzoic acid. Antioxidants and suspending agents may also be used.

- 15 The routes for administration (delivery) include, but are not limited to, one or more of: oral (e.g. as a tablet, capsule, or as an ingestible solution), topical, mucosal (e.g. as a nasal spray or aerosol for inhalation), nasal, parenteral (e.g. by an injectable form), gastrointestinal, intraspinal, intraperitoneal, intramuscular, intravenous, intrauterine, intraocular, intradermal, intracranial, intratracheal, intravaginal, intracerebroventricular, intracerebral, subcutaneous, ophthalmic (including intravitreal or intracameral), transdermal, rectal, buccal, vaginal, 20 epidural, sublingual.

- Where the pharmaceutical composition is to be delivered mucosally through the gastrointestinal mucosa, it should be able to remain stable during transit through the 25 gastrointestinal tract; for example, it should be resistant to proteolytic degradation, stable at acid pH and resistant to the detergent effects of bile.

It is to be understood that not all of the agent need be administered by the same route.

- Where appropriate, the pharmaceutical compositions can be administered by inhalation, in the form of a suppository or pessary, topically in the form of a lotion, gel, hydrogel, solution, cream, ointment or dusting powder, by use of a skin patch, orally in the form of tablets containing excipients such as starch or lactose or chalk, or in capsules or ovules either alone
- 5 or in admixture with excipients, or in the form of elixirs, solutions or suspensions containing flavouring or colouring agents, or they can be injected parenterally, for example intravenously, intramuscularly or subcutaneously. For parenteral administration, the compositions may be best used in the form of a sterile aqueous solution which may contain other substances, for example enough salts or monosaccharides to make the solution isotonic
- 10 with blood. The aqueous solutions should be suitably buffered (preferably to a pH of from 3 to 9), if necessary. The preparation of suitable parenteral formulations under sterile conditions is readily accomplished by standard pharmaceutical techniques well-known to those skilled in the art.
- 15 If the agent of the present invention is administered parenterally, then examples of such administration include one or more of: intravenously, intra-arterially, intraperitoneally, intrathecally, intraventricularly, intraurethrally, intrasternally, intracranially, intramuscularly or subcutaneously administering the agent; and/or by using infusion techniques.
- 20 For buccal or sublingual administration the compositions may be administered in the form of tablets or lozenges which can be formulated in a conventional manner.

The tablets may contain excipients such as microcrystalline cellulose, lactose, sodium citrate, calcium carbonate, dibasic calcium phosphate and glycine, disintegrants such as starch

25 (preferably corn, potato or tapioca starch), sodium starch glycollate, croscarmellose sodium and certain complex silicates, and granulation binders such as polyvinylpyrrolidone, hydroxypropylmethylcellulose (HPMC), hydroxypropylcellulose (HPC), sucrose, gelatin and acacia. Additionally, lubricating agents such as magnesium stearate, stearic acid, glyceryl behenate and talc may be included.

Solid compositions of a similar type may also be employed as fillers in gelatin capsules. Preferred excipients in this regard include lactose, starch, cellulose, milk sugar or high molecular weight polyethylene glycols. For aqueous suspensions and/or elixirs, the agent may be combined with various sweetening or flavouring agents, colouring matter or dyes,
 5 with emulsifying and/or suspending agents and with diluents such as water, ethanol, propylene glycol and glycerin, and combinations thereof.

As indicated, a therapeutic agent of the present invention can be administered intranasally or by inhalation and is conveniently delivered in the form of a dry powder inhaler or an aerosol
 10 spray presentation from a pressurised container, pump, spray or nebuliser with the use of a suitable propellant, e.g. dichlorodifluoromethane, trichlorofluoromethane, dichlorotetrafluoroethane, a hydrofluoroalkane such as 1,1,1,2-tetrafluoroethane (HFA 134ATM) or 1,1,1,2,3,3,3-heptafluoropropane (HFA 227EATM), carbon dioxide or other suitable gas. In the case of a pressurised aerosol, the dosage unit may be determined by
 15 providing a valve to deliver a metered amount. The pressurised container, pump, spray or nebuliser may contain a solution or suspension of the active compound, e.g. using a mixture of ethanol and the propellant as the solvent, which may additionally contain a lubricant, e.g. sorbitan trioleate. Capsules and cartridges (made, for example, from gelatin) for use in an inhaler or insufflator may be formulated to contain a powder mix of the agent and a suitable
 20 powder base such as lactose or starch.

Therapeutic administration of polypeptide modulators may also be accomplished using gene therapy. A nucleic acid including a promoter operatively linked to a heterologous polypeptide may be used to produce high-level expression of the polypeptide in cells transfected with the
 25 nucleic acid. DNA or isolated nucleic acids may be introduced into cells of a subject by conventional nucleic acid delivery systems. Suitable delivery systems include liposomes, naked DNA, and receptor-mediated delivery systems, and viral vectors such as retroviruses, herpes viruses, and adenoviruses.

APPLICATIONS

The modulators and compositions of the invention may be used to modulate the biological activity of a mannosidase II in a cell, including modulating a pathway in a cell regulated by the mannosidase II or modulating a mannosidase II with inappropriate activity in a cellular organism. In addition, a mannosidase II structure of the invention may be used to devise protocols to modulate the biological activity of a mannosidase II in a cell.

Cellular assays, as well as animal model assays *in vivo*, may be used to test the activity of a potential modulator of a mannosidase II as well as diagnose a disease associated with inappropriate mannosidase II activity. *In vivo* assays are also useful for testing the bioactivity of a potential modulator designed by the methods of the invention.

The invention further provides a method of treating a mammal, the method comprising administering to a mammal a modulator or pharmaceutical composition of the present invention.

Typically, a physician will determine the actual dosage which will be most suitable for an individual subject and it will vary with the age, weight and response of the particular patient and severity of the condition. The dosages below are exemplary of the average case. There can, of course, be individual instances where higher or lower dosage ranges are merited.

The specific dose level and frequency of dosage for any particular patient may be varied and will depend upon a variety of factors including the activity of the specific compound employed, the metabolic stability and length of action of that compound, the age, body weight, general health, sex, diet, mode and time of administration, rate of excretion, drug combination, the severity of the particular condition, and the individual undergoing therapy. By way of example, the pharmaceutical composition of the present invention may be administered in accordance with a regimen of 1 to 10 times per day, such as once or twice per day.

For oral and parenteral administration to human patients, the daily dosage level of the agent may be in single or divided doses.

- 5 The modulators (e.g. inhibitors) identified using the methods of the invention may be useful in the treatment and prophylaxis of tumor growth and metastasis of tumors. Anti-metastatic effects of inhibitors can be demonstrated using a lung colonization assay. For example, melanoma cells treated with an inhibitor may be injected into mice and the ability of the melanoma cells to colonize the lungs of the mice may be examined by counting tumor
- 10 nodules on the lungs after death. Suppression of tumor growth in mice by the inhibitor administered orally or intravenously may be examined by measuring tumor volume.

An inhibitor identified using the invention may have particular application in the prevention of tumor recurrence after surgery i.e. as an adjuvant therapy.

- 15 An inhibitor may be especially useful in the treatment of various forms of neoplasia such as leukemias, lymphomas, melanomas, adenomas, sarcomas, and carcinomas of solid tissues in patients. In particular, inhibitors can be used for treating malignant melanoma, pancreatic cancer, cervico-uterine cancer, ovarian cancer, cancer of the kidney such as metastatic renal
- 20 cell carcinoma, stomach, lung, rectum, breast, bowel, gastric, liver, thyroid, head and neck cancers such as unresectable head and neck cancers, lymphangitis carcinomatosa, cancers of the cervix, breast, salivary gland, leg, tongue, lip, bile duct, pelvis, mediastinum, urethra, bronchogenic, bladder, esophagus and colon, non-small cell lung cancer, and Kaposi's Sarcoma which is a form of cancer associated with HIV-infected patients with Acquired
- 25 Immune Deficiency Syndrome (AIDS). The inhibitors may also be used for other anti-proliferative conditions such as bacterial and viral infections, in particular AIDS.

- An inhibitor identified in accordance with the present invention may be used to treat immunocompromised subjects. For example, they may be used in a subject infected with
- 30 HIV, or other viruses or infectious agents including bacteria, fungi, and parasites, in a subject

undergoing bone marrow transplants, and in subjects with chemical or tumor-induced immune suppression.

Inhibitors may be used as hemorestorative agents and in particular to stimulate bone marrow cell proliferation, in particular following chemotherapy or radiotherapy. The myeloproliferative activity of an inhibitor of the invention may be determined by injecting the inhibitor into mice, sacrificing the mice, removing bone marrow cells and measuring the ability of the inhibitor to stimulate bone marrow proliferation by directly counting bone marrow cells and by measuring clonogenic progenitor cells in methylcellulose assays. The inhibitors can also be used as chemoprotectants, and in particular to protect mucosal epithelium following chemotherapy.

An inhibitor identified in accordance with the invention also may be used as an antiviral agent in particular on membrane enveloped viruses such as retroviruses, influenza viruses, cytomegaloviruses and herpes viruses. An inhibitor may also be used to treat bacterial, fungal, and parasitic infections. An inhibitor may also be used in the treatment of inflammatory diseases such as rheumatoid arthritis, asthma, inflammatory bowel disease, and atherosclerosis.

An inhibitor may also be used to augment the anti-cancer effects of agents such as interleukin-2 and poly-IC, to augment natural killer and macrophage tumoricidal activity, induce cytokine synthesis and secretion, enhance expression of LAK and HLA class I specific antigens; activate protein kinase C, stimulate bone marrow cell proliferation including hematopoietic progenitor cell proliferation, and increase engraftment efficiency and colony-forming unit activity, to confer protection against chemotherapy and radiation therapy (e.g. chemoprotective and radioprotective agents), and to accelerate recovery of bone marrow cellularity particularly when used in combination with chemical agents commonly used in the treatment of human diseases including cancer and acquired immune deficiency syndrome (AIDS). For example, an inhibitor can be used as a chemoprotectant in combination with anti-

cancer agents including doxorubicin, 5-fluorouracil, cyclophosphamide, and methotrexate, and in combination with isoniazid or NSAID.

Alpha-mannosidosis may also be amenable to treatment or prophylaxis by the method of the present invention.

5 The loss of mannosidase II has been found to alter N-glycan branching and attenuate the immune system's ability to maintain self-tolerance (Chui et al, PNAS 98(3):1142-1147, 2001). Therefore, the structures, modulators, compositions, and methods of the invention may be useful in the treatment or prophylaxis of autoimmune disease including systemic lupus erythematosus.

10 The present invention thus provides a method for treating the above-mentioned conditions in a subject comprising administering to a subject an effective amount of a modulator of the invention. The invention also contemplates a method for stimulating or inhibiting tumor growth or metastasis in a subject comprising administering to a subject an effective amount of a modulator of the invention.

15 The following non-limiting examples are illustrative of the present invention.

EXAMPLES

Example 1

***Drosophila* Mannosidase II preparation and structure determination**

Expression Plasmids

20 Constructs designed to express dGMII in *Drosophila* Schneider (S2) cells were based on the DES expression system available from *InVitrogen* with extensive modifications. Expression plasmids were constructed which had the dGMII under the control either of the inducible metallothioneine (MT) promoter or the strong constitutive actin 5.1 promoter (AC5). Amino terminal purification tags were inserted in place of the C-terminal tags in the
25 commercially available vectors. Earlier attempts, to truncate the mouse enzyme from at the C-terminus resulted in inactive protein, as had also been noted with the GlcNAc-transferases. Thus, it was elected to keep the C-terminus free. Expression vectors were created with either a 6His-tag, for purification on metal chelate columns such as Ni-NTA (*Qiagen*) or cobalt based Talon columns (*Clontech*), or with a Strep-tag for purification on streptavidin-Sepharose.
30 These affinity tags are initially non-cleavable and add approximately 8-10 residues to the end

of the protein. Finally, constructs were made either lacking or containing the Bip secretion sequence to direct the expressed protein into the cells or medium respectively.

Blasticidin Selection

- 5 Initial attempts at stable transfection with the recommended hygromycin selection system were unsuccessful. Therefore a new selection plasmid, pCopBlast was created which encodes blasticidin S deaminase under the control of the constitutive *copia* promoter. Blasticidin S has been used for stable transfectants of mammalian and plant cells, as well as yeast. Commercially available control plasmids expressing MT-induced secreted green fluorescent protein (GFP), or constitutive and MT-induced unsecreted bacterial β -galactosidase (LacZ) were used to test the suitability of blasticidin selection in S2 cells, and to optimize conditions for transfection, selection, and metallothionein induction. Stable transfectants could be selected with 16 μ g/ml blasticidin in Schneider's S2 medium containing 10% fetal bovine serum. Copper and cadmium were the only metals found to activate the MT promoter; copper favoured internally expressed proteins and cadmium, secreted proteins. Maintenance of the altered phenotype was also demonstrated for many weeks in the absence of the selective pressure of blasticidin demonstrating that these were indeed stably transfected cell lines.

Creation of Stably Expressing dGMII cell lines.

- 20 Starting with the pProtA expression plasmid from initial published studies [Rabouille *et al*, 1999], the mannosidase coding region was excised, and inserted into an in-frame *EcoRI* site immediately at the end of the affinity tag in the new plasmids. The position of a unique 3' restriction site outside the coding region meant that 100-200 bp of extra sequence was added between the stop codon and the SV40 polyadenylation site. This extra sequence was removed with a short PCR amplification using a unique internal restriction site. Both ends of the constructs were sequenced to verify proper reading frame and lack of PCR errors. The resulting constructs consist of the dGMII catalytic region with a short length of the stalk region, in a variety of "flavours" of promoter, affinity tag, and expression location.

Co-transfection of the pCopBlast selection plasmid with the mannosidase expression plasmids, followed by selection for blasticidin resistance allowed stable expressing cell lines after approximately one month. Mannosidase activity was measured using PNP-mannoside, in a microtitre plate assay. Protein was detected on Western blots using anti-PentaHis antibody (*Qiagen*). Only the secreted products showed activity, with similar levels in the constitutive and MT-promoter constructs. No difference in mannosidase activity was seen between His or Strep tagged protein. All subsequent work was carried out with the secreted constructs.

Insect cells do not grow at low population densities. Therefore, the initial population of selected cells was a mixed population with each cell in the culture having somewhat different levels of incorporated expression plasmid. To select individual cells with high levels of expression the stably transfected population was diluted to single cells in a 50:50 mix of conditioned medium and fresh medium with blasticidin. These were then plated in 96-well culture plates. After five weeks, about 10% of the wells showed growths of colonies large enough to transfer, of which roughly 30% had activity. The highest expressors had approximately 5 times the activity of the initial population in the MT-inducible strains. High-expressing clones of the constitutively expressed dGMII, were obtained suggesting that the continued production mannosidase by the cells may be detrimental, especially under the stressful conditions of single-cell selection.

Expression and purification of dGMII.

The availability of a stable clones expressing considerable amounts of mannosidase allowed optimization of induction, expression and purification conditions. In contrast to mammalian cells, insect cells are not highly adherent and will grow to high cell densities in a variety of culture vessels including roller bottles, spinners, fermentors and shake flasks. No CO₂ is required, and temperatures in the range of 25-28°C are optimal. With stably transfected cells, the difficulties that accompany baculoviral infection do not arise.

Initial experiments were carried out in S2 medium containing 10% bovine serum. Metal concentrations used to induce and time of induction were optimized for dGMII production. 10-20 μM cadmium proved optimal for induction. Although copper (at approximately 500-1000 μM) is generally used in the literature for induction, the sensitivity of dGMII to inhibition by copper ($\text{IC}_{50} = 25\mu\text{M}$, [26]) precluded its use. Cadmium has been reported to be detrimental to the growth of cells. However, at the concentrations used here, the cells continued to grow and maintain greater than 90% viability (as assessed by Trypan blue exclusion) until the end of the induction period. Cells were maintained in the continuous presence of cadmium for up to three passages.

As the dGMII was secreted into the medium, it was badly contaminated with bovine serum albumin (BSA). Attempts to remove the impurity by Blue Agarose or Ni-NTA chromatography were unsuccessful. To circumvent this contamination problem a number of serum-free media were evaluated for growth and expression levels. There are very few serum-free media developed for *Drosophila* cells so ones that have been used with baculovirus expression systems were evaluated. Ultimately the Excel420 medium from JRH Biosciences was successful.

A further advantage to this medium is the incorporation of seleno-methionine in place of methionine for crystallographic phasing purposes. A custom preparation of this medium was purchased from JRH free of Met and Cu. Inclusion of 50 $\mu\text{g}/\text{ml}$ of SeMet resulted in the production of protein with high enough incorporation (approximately 50% by mass spectrometry) for accurate phasing.

Cells were adapted to serum-free growth by gradual dilution with CCM3 medium and then they were switched into the other media for the expression studies. Excel420, CCM3 and SFX-Insect were clearly superior for maintaining healthy growth, though CCM3 provided slightly lower levels of expression. Levels of cadmium required for induction were optimized for each medium and were considerably lower than those required in S2 medium. For unknown reasons, constitutive expression of dGMII was much lower in serum-free medium.

Therefore, all subsequent scale-up and purifications were carried out with the MT-inducible 6His tagged constructs.

To scale-up protein expression cells were first grown as suspensions in spinner cultures.

- 5 These were subsequently put into 2.8 litre Fernbach flasks (1 litre Excel 420/flask) shaken at 100 rpm at 28°C. Cells were induced for 72 hours with 10 µM cadmium. After this time the medium was aseptically harvested and the cells are placed in the same volume of fresh medium for a further round of induction. This can be repeated at least one more time without significant cell death or loss of protein expression. Based on activity measurements up to 50
- 10 mg/litre of medium can be expressed every three days. This is approximately 1000 fold greater than in initial expression experiments in CHOP cells [Rabouille *et al*, 1999]. This procedure requires about 2 weeks of dedicated time in an incubator/shaker.

- 15 Purification is effected by batch binding first to Blue-Agarose, with elution by 350 mM NaCl, and then to Ni-NTA resin, with elution by 50 mM imidazole. Initial, secreted protein from the medium of the serum-free grown cells was loaded in batch to Blue-Agarose. The beads were then loaded into a column and washed with 20 column volumes of 50 mM NaCl in 20 mM Tris pH8. The majority of the mannosidase was eluted with 350 mM NaCl. This pooled eluant was loaded onto NiNTA, washed with low imidazole, and eluted with 50 mM imidazole to
- 20 achieve crystallization purity. The protein is then dialysed extensively against 10 mM Tris, pH 8.3 and 100 mM NaCl and concentrated (to greater than 20 mg/ml) for crystallization trials. All crystallization has been carried out from a single protein preparation.

Crystallization

- 25 Crystals of *Drosophila* Mannosidase II and complexes of the enzyme with various inhibitors were grown at room temperature using vapor diffusion and micro-batch crystallization techniques. Crystals were obtained under a wide variety of conditions. Polyethylene glycol (PEG) was used as a precipitant (with sizes: 4000; 6000; 8000; 10000; and 20000) at concentrations varying from 5-20%, in the presence of 5% 2,4-methyl-pentenediol (MPD) or
- 30 0-30% glycerol. Crystallization solutions were buffered at pH 7-7.5 using 100 mM buffer

solutions of Tris, Hepes or Mes. The crystals belong to the orthorhombic space group $P2_12_12_1$ with cell dimensions: $a=69\text{\AA}$; $b=110\text{\AA}$; $c=139\text{\AA}$; $\alpha=90^\circ$; $\beta=90^\circ$; $\gamma=90^\circ$. For the initial structure determination Seleno-Methionine-derivatized Mannosidase II crystals were grown in 8.5% PEG 6000, 5% MPD and 100 mM Tris pH 7.0, using micro seeds obtained from wild-type enzyme crystals. Data were collected from crystals that were frozen in liquid nitrogen after a stepwise increase of the MPD concentration in the crystallization solution from 5% to 25%.

A crystal of the invention is illustrated in the Figures. In particular, Figure 1 shows the active site of a mannosidase II. Figure 2 shows the secondary structure of *Drosophila* Golgi α -mannosidase II. Helices are in blue and β sheets are in red. Figure 3 shows the *Drosophila* golgi α -mannosidase II molecule with the colours representing where it is identical to human GMII. The red and blue represent deletions or insertions with respect to the human sequence. The green is a disulphide bond. Figure 4 shows the whole *Drosophila* golgi α -mannosidase II molecule in sticks with residues that are identical in the lysosomal manII as coloured balls (red or blue depending whether they are in the N-terminal or C-terminal part of the molecule). Figure 5 shows the active site of a *Drosophila* mannosidase. Figure 6 shows the DNA sequence of an expressed *Drosophila* mannosidase. Figure 7 shows an alignment of expressed secreted *Drosophila* mannosidase with human mannosidase.

Example 2

Experimental Procedures

Protein Overexpression and Purification

Expression, purification and crystallization of the dGMII will be described in detail elsewhere. Briefly, the cDNA was inserted behind an inducible promoter, and used to stably transfect *Drosophila* S2 cells. Single cell clones secreting high levels of dGMII were chosen and adapted to serum-free medium. Unlabelled dGMII was isolated from the supernatants of cells grown in Fernbach flasks by batch binding to Blue-Agarose (Sigma). The protein was eluted from the Blue-Agarose using NaCl and further purified by Ni-NTA chromatography (Qiagen). EDTA (5 mM) was added to scavenge any free nickel. The protein was extensively

dialyzed against 10 mM Tris pH 8 containing 100 mM NaCl, concentrated to 25 mg/ml, and stored in aliquots at -80°C .

For seleno-methionine labeling, a custom batch of Ex-Cell 420 (#006140E JRH Biosciences, Lenexa KS) was used which lacked any added methionine or copper. Cells were grown to high cell density in a spinner flask in standard medium, resuspended in the "methionine-free" medium and allowed to starve for 4 hours prior to the addition of 50 mg/l of seleno-methionine (Sigma). After 70 hrs of induction the protein was purified from the supernatant as outlined above except that 5 mM β -mercaptoethanol was present throughout the purification.

10

Crystallization and Data Collection

Crystals of *Drosophila* Mannosidase II and complexes of the enzyme with various inhibitors were grown at room temperature using vapor diffusion and micro-batch crystallization techniques. Crystals were obtained under a wide variety of conditions. Polyethylene glycol (PEG) was used as a precipitant (with sizes: 4000; 6000; 8000; 10000; and 20000) at concentrations varying from 5-20%, in the presence of 5% 2,4-methyl-pentane-diol (MPD) or 0-30% glycerol. Crystallization solutions were buffered at pH 7-7.5 using 100 mM buffer solutions of Tris, Hepes or Mes. The crystals belong to the orthorhombic space group $P2_12_12_1$ with cell dimensions: $a=69\text{\AA}$; $b=110\text{\AA}$; $c=139\text{\AA}$; $\alpha=90^{\circ}$; $\beta=90^{\circ}$; $\gamma=90^{\circ}$. For the initial structure determination Seleno-Methionine-derivatized Mannosidase II crystals were grown in 8.5% PEG 6000, 5% MPD and 100 mM Tris pH 7.0, using micro seeds obtained from wild-type enzyme crystals. Data were collected from crystals that were frozen in liquid nitrogen after a stepwise increase of the MPD or glycerol concentration in the crystallization solution from 5% to 25%. Data collection was performed at the Advanced Photon Source facility at Argonne National Laboratories, Argonne, Illinois. Beam line BM14D was used for collection of multiple wavelength anomalous dispersion data and BM14C for collection of high-resolution data.

25

Structure Determination

The structure of uncomplexed dGMII was determined by MAD phasing at the Selenium absorption edge with datasets collected at an absorption peak wavelength of 0.9786 Å, inflection wavelength of 0.9790 Å and a remote wavelength of 0.9770 Å. Initial positions of 26 out of 28 Selenium atoms were determined with the program Solve (Terwilliger et al., 1987) with an initial Figure of Merit (FOM) of 0.67. The experimental map obtained after density modification, using the program DM of the CCP4 program package (Cowtan, 1994), showed continuous density of very high quality for the whole molecule. The structure was traced using the program O (Jones et al., 1991) using the density modified experimental map. The model was refined using the program CNS (Brünger et al., 1998).

Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES)

The metal content in dGMII samples was analyzed by inductively coupled plasma atomic emission spectroscopy using the ICP-AES model 'Optima 3000 DV' (Dual View) from Perkin Elmer. The zinc content in the protein samples was determined relative to an equivalent amount of dGMII assay buffer.

RESULTS AND DISCUSSION

Protein expression

The cDNA for *Drosophila* GMII is predicted to encode a protein of 1108 amino acids. For protein expression in *Drosophila* cells the first 75 amino acids consisting of the cytosolic and transmembrane domains and most of the stalk region were eliminated. The remaining cDNA was cloned in-frame behind a secretion signal.

Numbering of our construct starts at the point where the expressed protein is expected to be cleaved, by signal peptidase, from the secretion signal. Three extra amino terminal residues, a 6-histidine tag, and a glycine, glutamine and phenylalanine were added in cloning. The first aspartate (D13) of the construct corresponds to aspartate 76 of the native protein. The first residue seen in the structure (C31) corresponds to C94, and the final residue S1044 to S1107, of the full-length sequence.

Structure Determinations

The structure of *Drosophila* Golgi α -mannosidase II has been determined by the multi-wavelength anomalous dispersion (MAD) phasing method using a data set collected from a crystal of Seleno-methionine derivatized enzyme (Table 9). This is the first reported structure of a Se-Met substituted enzyme produced in a *Drosophila* overexpression system. The native dGMII structure has been refined to a resolution of 1.76Å with some data to 1.4Å resolution (see refinement statistics presented in Table 10). The model contains residues 31-1044 of the recombinant enzyme (numbered as described above), as well as a zinc ion, an N-glycan residue, a molecule of the cryo-protectant, 2-methyl-2,4-pentanediol (MPD), and a tris(hydroxymethyl)-aminomethane (Tris) molecule. The presence of the enzyme-bound zinc ion was confirmed by Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES). The final structure of the dGMII-swainsonine complex has been refined at 1.87Å resolution and the dGMII-DMNJ complex to 1.69Å resolution, with some data to 1.5Å resolution.

Overall Architecture of dGMII

The structure of dGMII reveals a previously unobserved protein fold consisting of an N-terminal α/β domain, a three-helical bundle and an all- β C-terminal domain forming a single compact entity, connected by 5 internal disulfide bonds and stabilized by a zinc binding site (Figure 8B). The oval shaped molecule has two distinct faces (Figure 8C). The N-terminal face of the molecule is convex, whereas the opposing face of the enzyme has a planar surface. N-terminal residue Cys-31 is the last residue of the so-called stalk region, the linkage between the catalytic domain and the transmembrane domain. Cys-31 is located at the convex face of the molecule, indicating that this surface of the molecule presumably faces the inner side of the Golgi membrane, while the planar surface, containing the active site cavity (see below), faces the Golgi lumen.

The N-terminal α/β domain is comprised of an inner core of three β -sheets (A, B and C, Figure 8B) consisting of 11, mostly parallel β -strands, surrounded by 16 α -helices. This

domain contains a GlcNAc residue found in the electron density map at a consensus N-glycosylation site (Asn-194), located at the N-terminus of helix 7. The α/β domain is stabilized by three disulfide bonds: between Cys-31 and Cys-1032 connecting the N and C-terminal extremes of dGMII; Cys-275 and Cys-282 linking helices 10 and 11; Cys-283 and Cys-297 linking helix 11 with a loop between helix 13 and the core of parallel β -sheets. The cysteines forming the latter two disulfide-bonds are conserved in the human Golgi α -mannosidase II sequence.

The C-terminal half of the protein contains a three-helix bundle, comprised of helices 18, 20 and 21, and is connected to the N-terminal α/β -domain via a zinc binding site. The zinc ion is coordinated in a T_5 -square-based pyramidal geometry involving residues: Asp-90, His-92, Asp-204 and His-471. Furthermore, the C-terminal domain contains two immunoglobulin-like domains: a small β -sandwich consisting of 12 anti-parallel strands from β -sheets D and E, and a large 21-strand structure involving β -sheets F and G.

A barrel formed by the three-helix bundle and helix-23 together with the two β -sandwich structures result in a narrow pore in the center of the C-terminal domain. The pore is lined by six arginine residues: Arg-540, 565, 617, 770, 777 and 893, contributing to the overall positive charge of the pore (Figure 9A). A hairpin loop, connecting two strands of β -sheet D (Figure 8B and C, residues 527-540, shown in yellow) protrudes into the center of the barrel on the planar side of the molecule. Arginine residue 530, located at the tip of the type-I β -turn in this loop, plugs the pore preventing an open channel through the protein. The resulting crater-like cavity on the convex side of the molecule is 20Å deep, with a diameter of 20Å funneling to 8Å at the bottom of the cavity. B-factor values of residues within the loop indicate a higher degree of flexibility compared to the rest of the structure (average B-factor values: $\sim 33\text{\AA}^2$ and $\sim 15\text{\AA}^2$, respectively).

Active Site

The molecular surface representation of the planar face of dGMII reveals an extended pocket in the N-terminal α/β -domain, formed primarily by acidic residues (Figure 9B). These same residues form the core of a large, contiguous, surface-exposed patch, of highly conserved amino acids, in comparison with the human GMII sequence (Figure 9C). The active site of the enzyme is located in a small cavity in the side of this conserved, negatively charged region. The cavity is lined by aromatic residues Trp-95, Phe-206, Tyr-269 and Tyr-727, which are involved in hydrophobic and hydrogen-bond interactions with a bound Tris molecule in the unliganded structure (Figure 10A). Tris is known to inhibit dGMII activity (Rabouille et al., 1999). Additional hydrophobic and hydrogen bond interactions are observed with Asp-92 and Asp-204. At the open side of the cavity the Tris molecule hydrogen bonds with Arg-228, Tyr-269 and Asp-341 (not shown) via water molecules.

A key feature of the active site is the coordination of the zinc ion by the Tris hydroxyl group O2. In the enzyme-Tris complex the zinc ion is bound in a T_5 -square-based pyramidal geometry, coordinated by the OD1 oxygen moieties of aspartate residues 92 and 204; the NE2 nitrogens of histidines 90 and 471; and the hydroxyl oxygen O2 of the bound Tris molecule, as represented in Figure 10A. The T_5 geometry is further stabilized by hydrogen bonds between the zinc coordinating atoms and the existence of H-bonds between the ND1 nitrogen atoms of the histidines 90 and 471 with the carbonyl oxygen of seleno-methionine 167 and a water molecule, respectively (not shown). The presence of these, so called, 'elec-His-Zn motifs' is believed to increase the basicity and the ligand strength of the histidine and arrange it correctly for interaction with the metal (Alberts et al., 1998). In an uninhibited enzyme, Tris would likely be replaced by a coordinating water molecule. As discussed below, this arrangement has implications for substrate binding and transition state stabilization.

The occurrence of zinc in Family 38 glycosyl hydrolases has been described by Snaith (1975) in Jack-bean α -mannosidase. A possible role for zinc in catalysis was indicated by inactivation of the enzyme by chelating agents and bivalent metal ions such as Cu^{2+} . Copper

has also been shown to effectively inactivate *Drosophila* and mouse GMII (Rabouille et al., 1999).

Inhibitor Binding

5 The structures of dGMII in complex with the inhibitors DMNJ and swainsonine show that both compounds bind to the same active site in a similar manner (Figure 10B and C). The binding of both inhibitors involves a large contribution of hydrophobic interactions involving aromatic residues Trp-95, Phe-206 and Tyr-727, forming the walls of the cavity. The inhibitor ring structures are stacked against Trp-95, a feature seen in several carbohydrate binding and
10 hydrolyzing proteins (see Boraston et al., 2000 and review papers therein), and stabilized by hydrogen bonds and interactions with the zinc ion. In the complexes of dGMII with either DMNJ or swainsonine the T_5 geometry of the bound zinc ion, as seen in the Tris-bound enzyme, is transformed into T_6 -octahedral coordination. In both the dGMII complexes the inhibitor O2 hydroxyl oxygen replaces the O2 oxygen of Tris and the O3 hydroxyl oxygen
15 forms the apex of the second pyramid. In order to obey the restraints of the T_6 geometry, the plane of the swainsonine ring structure is tilted with respect to the saccharide-like ring of the bound DMNJ molecule. This enables the formation of a hydrogen bond between the zinc-coordinating OD1 oxygen of Asp-204 and the N4 nitrogen at the fusion of the five and six-membered rings of swainsonine. As in the Tris-bound enzyme, the zinc coordinating oxygen
20 atoms of the inhibitors are involved in hydrogen bond interactions with the neighboring metal binding residues of the enzyme.

The position of the DMNJ and swainsonine molecules is stabilized in the active site by hydrogen bonds between carboxylic oxygens OD1 and OD2 of residue Asp-472 and hydroxyl
25 oxygens O3 and O4 (O5 in swainsonine) of the inhibitors, analogous to the O1 and O2 interactions seen in the enzyme-Tris complex. As in the Tris-bound enzyme, DMNJ is involved in additional hydrogen bonds, via water molecules, with the NH2 nitrogen of Arg-228, the hydroxyl oxygen of Tyr-269, the backbone carbonyl oxygen of Arg-876 (not shown) and the OD1 oxygen of Asp-204.

The displacement of the Tris molecule by either of the inhibitors only slightly affects the zinc binding site by weakening the internal hydrogen bonds between Asp-204 and histidines 90 and 471. No major conformational changes are observed between the Tris-bound and the inhibitor-bound mannosidase molecules as their backbones are virtually superimposable, with
 5 root-mean-square-deviations between C α atoms of 0.068Å (dGMII-DMNJ complex) and 0.087Å (dGMII-swainsonine complex).

Catalytic mechanism

Golgi α -mannosidase II is a retaining mannosyl hydrolase, which cleaves the linkage between
 10 the C1 atom of M7 and M6 (Figure 8A) and, respectively, the O3 and O6 atom of the α 1,6-linked mannosyl branch (M4) of GlcNAcMan₅GlcNAc₂. The catalytic mechanism is proposed to follow a very similar path to the corresponding retaining β -glycosidases (Braun et al., 1995; White and Rose, 1997). This is a two-stage reaction that usually involves two carboxylic acids, one acting as a nucleophile attacking the glycosidic bond, and the other as a
 15 general acid/base catalyst. Nucleophilic attack of one carboxylic acid results in glycosylation of the enzyme by forming a covalent intermediate followed by a second deglycosylation step, each step passing through an oxocarbenium ion-like transition state.

Based on the structure of the dGMII-inhibitor complexes we speculate that the mannose
 20 residues on the α 1,6-linked mannosyl branch (M4) bind to the enzyme at the same site and in the same manner as mannose-like inhibitor DMNJ. Coordination of the zinc ion with the O2 and O3 hydroxyl oxygens thereby contributes to the enzyme's specificity for mannose. Four acidic amino acid residues, Asp-92, Asp-204, Asp-341 and Asp-472, are candidates for catalytic side chains based on their proximity to the active site (Figure 10C). Results from a
 25 recent study on the mechanism of catalysis in Jack-bean α -mannosidase by Withers and co-workers, using reagents that trap the glycosyl-enzyme intermediate, identified an aspartate residue as the catalytic nucleophile in that enzyme (Howard et al., 1998). Comparison of the highly conserved sequence region surrounding this aspartate in Jack-bean α -mannosidase with the same sequence region in dGMII suggests that aspartate residue 204 in dGMII is the
 30 catalytic nucleophile that attacks the glycosidic linkage. For this reaction it is required that

Asp-204 is close to the anomeric carbon of the mannose substrate. In the dGMII-DMNJ complex, however, the equivalent anomeric carbon is located 4.6Å from the nucleophile. Binding of the C2 and C3 substituent hydroxyl oxygens of the flattened five-membered ring in swainsonine causes the inhibitor molecule to tilt, bringing its bridgehead nitrogen N4, in the analogous position to C1 in the substrate, significantly closer to the putative nucleophilic Asp-204 (3.2Å). This tilted binding mode, stabilized by a hydrogen bond between N4 and Asp-204 and by van der Waals stacking interactions between the 6-membered ring of swainsonine and Phe-206, may resemble the mode of binding of the ring-flattened transition state mannosyl cation. Thus, Phe-206 would stabilize the transition state by compensating for the loss of stacking interactions of the substrate with Trp-95. The highly complementary shape of swainsonine with the active site of dGMII, and its structural analogy with the skewed boat transition state conformation, could therefore explain its 10,000 times higher binding affinity for the enzyme, compared to the substrate-mimic DMNJ (data not shown).

The OD1 oxygen of Asp-204, the putative nucleophile, directly coordinates the zinc ion, implicating a role for the zinc in positioning the nucleophile and in the stabilization of protonation states of the reacting partners. It is tempting to speculate that the change of zinc coordination from T5 to the less favored T6 state (Alberts et al., 1998) on substrate binding may also contribute to the mechanism. From the Tris and DMNJ structures, it is predicted that the coordination would revert to T5 on product release. If so, this transition may energetically facilitate the deglycosylation step. Such evidence of direct zinc involvement in the catalytic mechanism of a glycosyl hydrolase is unprecedented. Arg-288 positions Asp-204 for nucleophilic attack by virtue of hydrogen bond interactions between its NE and NH2 nitrogens and the OD2 oxygen of Asp-204 (Figure 10C). Based on the expected distance between the two catalytic residues (~5.5Å, Davies and Henrissat, 1995) likely candidates for the catalytic base are Asp-341 and Asp-472 (preliminary indications are that the D341N mutant is catalytically inactive, DAK unpublished results). Recent data suggest that other residues, such as tyrosines, possibly play a role in glycosidic bond cleavage (Davies and Henrissat, 1995). Tyrosine residues 269 and 727 are positioned to help stabilize the transition state.

Substrate Binding and Cleavage

The function of GMII is dependent on the presence of β 1,2-GlcNAc (G3, Figure 8A), added to α 1,3-linked mannose (M5) by GlcNAc transferase I (see reviews: Kornfeld and Kornfeld, 1985; Moremen et al., 1994). This β 1,2-GlcNAc dependence suggests the presence of an additional saccharide-binding site in GMII. Evidence for such a binding site is provided by the observation of an MPD molecule in the structure of dGMII, in the vicinity of the active site cavity. MPD was used as a cryo-protectant during the procedure of flash-freezing of the crystal, prior to data collection (see experimental procedures). The replacement of MPD by the alternative cryo-protectant glycerol resulted in the occupation of this same position by a glycerol molecule. Glycerol has been shown to mimic saccharide binding in structures of glycosyl hydrolases (Schmidt et al., 1998, Vallée et al., 2000).

The observation of the binding of MPD and glycerol near dGMII's active site (Figure 11A) enables a hypothesis regarding the binding and cleavage of α 1,6 and α 1,3-linked mannoses on the α 1,6-linked mannose branch of the GlcNAcMan₅GlcNAc₂ oligosaccharide. In this hypothesis, the MPD binding site is suggested to be the putative site of interaction for β 1,2-GlcNAc (G3, Figure 8A), enabling anchoring of the oligosaccharide substrate in the conserved negatively charged pocket. In Figure 11B a model is shown of a GlcNAcMan₅GlcNAc₂ structure with the β 1,2-GlcNAc residue placed in the MPD binding site and the α 1,6-linked M6 mannose docked into the active site, with its hydroxyl oxygens O2 and O3 coordinating the zinc ion. As required, the asparagine linked β 1,4-GlcNAc residues G1 and G2 extend away from the surface of the molecule (into the Golgi lumen). Both M4 and the second substrate α 1,3-linked M7 mannose are located within the conserved negatively charged pocket pointing away from the active site cavity. In this orientation it can be easily visualized that after cleavage of the α 1,6-linked M6 the second, α 1,3-linked M7 can be brought into the active site cavity by a $\sim 180^\circ$ rotation, through the extended pocket, around the flexible α 1,6-linkage of M4 (see Figure 11C). In addition to the dependence of GMII's action on the presence of the G3 β 1,2-GlcNAc, this model provides a mechanism for the

cleavage of both mannose residues without major conformational change of the enzyme, and more importantly, without release of the polypeptide-carbohydrate complex, anchored by the stationary GlcNAc, between the two cleavage events. Finally, this model suggests that the α 1,6-linked M6 mannose is preferentially cleaved first, enabling the shorter α 1,3-linked M7 residue to rotate through the pocket with minimal steric hindrance; according to our model, the proposed 'swivel' mechanism would be slightly hampered should the M7 mannose be cleaved first. This is supported by data reported for α -mannosidase II from mung bean seedlings, *Xenopus* liver, Rat liver Golgi and for enzyme-activity in homogenates of insect cells, showing preferential hydrolytic activity on the M6 mannosyl residue (Kaushal et al., 1990; Altmann and Martz, 1995; Ren et al., 1997).

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Conclusions

The structure of the catalytic domain of Golgi α -mannosidase II provides the basis for its zinc ion mediated specificity for mannose, as well as insight into its reaction mechanism. In addition, the result illustrates the structural basis for the mechanism of inhibition by the anti-cancer agent swainsonine, which we propose mimics aspects of the transition state binding. This understanding is critical for the rational design of swainsonine variants and/or novel mechanism-based compounds as specific α -mannosidase II inhibitors, for the treatment of several forms of cancer. A bound MPD molecule identifies a putative GlcNAc binding pocket, located near the active site and enables a hypothesis explaining the enzyme's dependency on the single GlcNAc substitution of the GlcNAcMan₅GlcNAc₂ substrate for binding. Furthermore, it suggests a novel mechanism for successive hydrolysis of the α 1,6 and α 1,3-linked mannose residues, resulting in the tri-mannose core glycosyl structure. Finally, it opens the door to the design of novel highly specific inhibitors linking together functional sites in the enzyme.

Various modifications and variations of the described methods and system of the invention will be apparent to those skilled in the art without departing from the scope and spirit of the invention. Although the invention has been described in connection with specific preferred embodiments, it should be understood that the invention as claimed should not be unduly limited to such specific embodiments. Indeed, various modifications of the described modes for carrying out the invention which are obvious to those skilled in chemistry or biology or related fields are intended to be covered by the present invention. All publications mentioned in the above specification are herein incorporated by reference.

Table 1

Structural coordinates of a Drosophila Golgi α -mannosidase II.

REMARK coordinates from simulated annealing refinement
 REMARK refinement resolution: 500.0 - 1.4 A
 5 REMARK starting r= 0.1816 free_r= 0.2003
 REMARK final r= 0.1894 free_r= 0.2063
 REMARK rmsd bonds= 0.004594 rmsd angles= 1.32379
 REMARK wa_initial= 0.264577 wa_dynamics= 0.28954 wa_final= 0.28836
 REMARK target= mlf md-method= torsion annealing schedule= slowcool
 10 REMARK starting temperature= 1000 total md steps= 40 * 6
 REMARK sg= P2(1)2(1)2(1) a= 68.865 b= 109.718 c= 138.599 alpha= 90 beta= 90
 gamma= 90
 REMARK parameter file 1 : CNS_TOPPAR:protein_rep.param
 REMARK parameter file 2 : CNS_TOPPAR:water_rep.param
 15 REMARK parameter file 3 : CNS_TOPPAR:ion.param
 REMARK parameter file 4 : trs.par
 REMARK parameter file 5 : mpd.par
 REMARK parameter file 6 : cis_peptide.param
 REMARK parameter file 7 : CNS_TOPPAR:carbohydrate.param
 20 REMARK molecular structure file: dgmlcgen.mtf
 REMARK input coordinates: dgmlcgen.pdb
 REMARK reflection file= ../semethiR.cv
 REMARK ncs= none
 REMARK B-correction resolution: 6.0 - 1.4
 25 REMARK initial B-factor correction applied to fobs :
 REMARK B11= 0.609 B22= -0.765 B33= 0.155
 REMARK B12= 0.000 B13= 0.000 B23= 0.000
 REMARK B-factor correction applied to coordinate array B: 0.042
 REMARK bulk solvent: density level= 0.35999 e/A³, B-factor= 42.8385 A²
 30 REMARK reflections with |Fobs|/sigma_F < 0.0 rejected
 REMARK reflections with |Fobs| > 10000 * rms(Fobs) rejected
 REMARK theoretical total number of refl. in resol. range: 206243 (100.0%)
 REMARK number of unobserved reflections (no entry or |F|=0): 59797 (29.0%)
 REMARK number of reflections rejected: 0 (0.0%)
 35 REMARK total number of reflections used: 146446 (71.0%)
 REMARK number of reflections in working set: 139067 (67.4%)
 REMARK number of reflections in test set: 7379 (3.6%)
 CRYST1 68.865 109.718 138.599 90.00 90.00 90.00 P 21 21 21
 REMARK FILENAME="dgmlcan2_1.pdb"
 40 REMARK DATE:13-Jul-2000 03:16:24 created by user: jvdelsen
 REMARK VERSION:0.9a
 ATOM 1 C CYS A 31 41.938 37.136 -18.751 1.00 22.64 A
 ATOM 2 O CYS A 31 41.423 36.540 -19.699 1.00 22.74 A
 ATOM 3 CB CYS A 31 43.833 38.473 -19.585 1.00 22.94 A
 45 ATOM 4 SG CYS A 31 45.532 39.110 -19.452 1.00 23.66 A
 ATOM 5 N CYS A 31 44.185 36.072 -19.063 1.00 24.03 A
 ATOM 6 CA CYS A 31 43.449 37.310 -18.673 1.00 23.18 A
 ATOM 7 N GLN A 32 41.229 37.666 -17.760 1.00 22.29 A
 ATOM 8 CA GLN A 32 39.775 37.591 -17.754 1.00 22.06 A
 50 ATOM 9 CB GLN A 32 39.196 38.061 -16.417 1.00 24.01 A
 ATOM 10 CG GLN A 32 39.409 37.126 -15.248 1.00 27.12 A
 ATOM 11 CD GLN A 32 38.470 37.442 -14.098 1.00 28.66 A
 ATOM 12 OE1 GLN A 32 37.252 37.307 -14.224 1.00 29.78 A

	ATOM	13	NE2	GLN	A	32	39.031	37.872	-12.973	1.00	29.39	A
	ATOM	14	C	GLN	A	32	39.230	38.498	-18.848	1.00	20.52	A
	ATOM	15	O	GLN	A	32	39.817	39.534	-19.162	1.00	19.74	A
5	ATOM	16	N	ASP	A	33	38.109	38.096	-19.432	1.00	19.11	A
	ATOM	17	CA	ASP	A	33	37.460	38.885	-20.470	1.00	17.47	A
	ATOM	18	CB	ASP	A	33	36.651	37.955	-21.384	1.00	18.06	A
	ATOM	19	CG	ASP	A	33	35.993	38.681	-22.540	1.00	19.46	A
	ATOM	20	OD1	ASP	A	33	35.738	38.020	-23.570	1.00	20.28	A
10	ATOM	21	OD2	ASP	A	33	35.714	39.893	-22.421	1.00	19.63	A
	ATOM	22	C	ASP	A	33	36.554	39.839	-19.692	1.00	16.94	A
	ATOM	23	O	ASP	A	33	35.614	39.407	-19.033	1.00	18.06	A
	ATOM	24	N	VAL	A	34	36.854	41.132	-19.748	1.00	13.82	A
	ATOM	25	CA	VAL	A	34	36.076	42.121	-19.007	1.00	12.33	A
15	ATOM	26	CB	VAL	A	34	36.982	43.291	-18.536	1.00	11.75	A
	ATOM	27	CG1	VAL	A	34	38.158	42.744	-17.744	1.00	12.48	A
	ATOM	28	CG2	VAL	A	34	37.485	44.093	-19.737	1.00	11.56	A
	ATOM	29	C	VAL	A	34	34.912	42.692	-19.806	1.00	11.58	A
	ATOM	30	O	VAL	A	34	34.227	43.610	-19.350	1.00	11.18	A
20	ATOM	31	N	VAL	A	35	34.668	42.129	-20.986	1.00	11.40	A
	ATOM	32	CA	VAL	A	35	33.601	42.623	-21.847	1.00	11.88	A
	ATOM	33	CB	VAL	A	35	34.164	43.016	-23.234	1.00	11.64	A
	ATOM	34	CG1	VAL	A	35	33.031	43.463	-24.159	1.00	11.96	A
	ATOM	35	CG2	VAL	A	35	35.199	44.113	-23.082	1.00	11.54	A
25	ATOM	36	C	VAL	A	35	32.422	41.689	-22.106	1.00	12.53	A
	ATOM	37	O	VAL	A	35	31.268	42.100	-22.012	1.00	12.16	A
	ATOM	38	N	GLN	A	36	32.719	40.434	-22.422	1.00	13.91	A
	ATOM	39	CA	GLN	A	36	31.685	39.471	-22.796	1.00	15.60	A
	ATOM	40	CB	GLN	A	36	32.217	38.631	-23.955	1.00	15.34	A
30	ATOM	41	CG	GLN	A	36	32.986	39.457	-24.972	1.00	16.14	A
	ATOM	42	CD	GLN	A	36	33.458	38.641	-26.151	1.00	16.81	A
	ATOM	43	OE1	GLN	A	36	32.699	38.388	-27.084	1.00	18.19	A
	ATOM	44	NE2	GLN	A	36	34.714	38.214	-26.110	1.00	16.46	A
	ATOM	45	C	GLN	A	36	31.077	38.548	-21.748	1.00	17.41	A
35	ATOM	46	O	GLN	A	36	30.128	37.825	-22.048	1.00	19.27	A
	ATOM	47	N	ASP	A	37	31.609	38.557	-20.532	1.00	18.41	A
	ATOM	48	CA	ASP	A	37	31.080	37.700	-19.475	1.00	18.97	A
	ATOM	49	CB	ASP	A	37	32.190	36.818	-18.885	1.00	21.17	A
	ATOM	50	CG	ASP	A	37	32.759	35.834	-19.891	1.00	22.94	A
40	ATOM	51	OD1	ASP	A	37	31.965	35.181	-20.599	1.00	24.67	A
	ATOM	52	OD2	ASP	A	37	34.000	35.707	-19.963	1.00	24.47	A
	ATOM	53	C	ASP	A	37	30.444	38.513	-18.351	1.00	18.35	A
	ATOM	54	O	ASP	A	37	31.145	39.128	-17.548	1.00	20.02	A
	ATOM	55	N	VAL	A	38	29.117	38.511	-18.294	1.00	17.12	A
45	ATOM	56	CA	VAL	A	38	28.404	39.242	-17.250	1.00	16.29	A
	ATOM	57	CB	VAL	A	38	26.902	39.362	-17.579	1.00	16.90	A
	ATOM	58	CG1	VAL	A	38	26.180	40.114	-16.468	1.00	16.50	A
	ATOM	59	CG2	VAL	A	38	26.721	40.074	-18.915	1.00	16.46	A
	ATOM	60	C	VAL	A	38	28.559	38.512	-15.917	1.00	15.90	A
50	ATOM	61	O	VAL	A	38	28.108	37.377	-15.763	1.00	15.86	A
	ATOM	62	N	PRO	A	39	29.204	39.157	-14.933	1.00	15.02	A
	ATOM	63	CD	PRO	A	39	29.892	40.459	-14.998	1.00	14.29	A
	ATOM	64	CA	PRO	A	39	29.399	38.531	-13.623	1.00	14.60	A
	ATOM	65	CB	PRO	A	39	30.154	39.603	-12.836	1.00	14.74	A
	ATOM	66	CG	PRO	A	39	30.927	40.321	-13.901	1.00	13.83	A
55	ATOM	67	C	PRO	A	39	28.089	38.150	-12.949	1.00	14.68	A

5	ATOM	68	O	PRO	A	39	27.092	38.866	-13.045	1.00	14.60	A
	ATOM	69	N	ASN	A	40	28.095	37.009	-12.270	1.00	15.48	A
	ATOM	70	CA	ASN	A	40	26.913	36.557	-11.557	1.00	16.28	A
	ATOM	71	CB	ASN	A	40	26.727	35.048	-11.725	1.00	18.96	A
	ATOM	72	CG	ASN	A	40	25.614	34.501	-10.855	1.00	21.26	A
10	ATOM	73	OD1	ASN	A	40	24.500	35.026	-10.847	1.00	24.33	A
	ATOM	74	ND2	ASN	A	40	25.909	33.437	-10.119	1.00	23.94	A
	ATOM	75	C	ASN	A	40	27.113	36.899	-10.089	1.00	15.67	A
	ATOM	76	O	ASN	A	40	27.902	36.259	-9.396	1.00	15.97	A
	ATOM	77	N	VAL	A	41	26.408	37.922	-9.623	1.00	14.19	A
15	ATOM	78	CA	VAL	A	41	26.522	38.347	-8.232	1.00	12.77	A
	ATOM	79	CB	VAL	A	41	27.144	39.764	-8.126	1.00	11.76	A
	ATOM	80	CG1	VAL	A	41	28.584	39.738	-8.606	1.00	12.95	A
	ATOM	81	CG2	VAL	A	41	26.328	40.755	-8.946	1.00	12.22	A
	ATOM	82	C	VAL	A	41	25.162	38.353	-7.547	1.00	12.71	A
20	ATOM	83	O	VAL	A	41	24.125	38.479	-8.198	1.00	13.39	A
	ATOM	84	N	ASP	A	42	25.171	38.217	-6.226	1.00	11.92	A
	ATOM	85	CA	ASP	A	42	23.934	38.211	-5.461	1.00	12.46	A
	ATOM	86	CB	ASP	A	42	24.210	37.791	-4.017	1.00	13.55	A
	ATOM	87	CG	ASP	A	42	24.708	36.366	-3.913	1.00	14.63	A
25	ATOM	88	OD1	ASP	A	42	24.009	35.457	-4.416	1.00	16.11	A
	ATOM	89	OD2	ASP	A	42	25.788	36.144	-3.327	1.00	14.87	A
	ATOM	90	C	ASP	A	42	23.261	39.576	-5.480	1.00	11.96	A
	ATOM	91	O	ASP	A	42	22.036	39.675	-5.540	1.00	12.50	A
	ATOM	92	N	VAL	A	43	24.066	40.632	-5.419	1.00	10.49	A
30	ATOM	93	CA	VAL	A	43	23.537	41.987	-5.434	1.00	10.78	A
	ATOM	94	CB	VAL	A	43	23.693	42.686	-4.056	1.00	10.05	A
	ATOM	95	CG1	VAL	A	43	23.072	44.078	-4.105	1.00	10.79	A
	ATOM	96	CG2	VAL	A	43	23.042	41.848	-2.955	1.00	10.64	A
	ATOM	97	C	VAL	A	43	24.291	42.806	-6.471	1.00	9.86	A
35	ATOM	98	O	VAL	A	43	25.515	42.922	-6.414	1.00	10.17	A
	ATOM	99	N	GLN	A	44	23.559	43.336	-7.443	1.00	9.59	A
	ATOM	100	CA	GLN	A	44	24.158	44.174	-8.471	1.00	9.74	A
	ATOM	101	CB	GLN	A	44	23.920	43.576	-9.860	1.00	9.50	A
	ATOM	102	CG	GLN	A	44	24.977	43.983	-10.869	1.00	9.04	A
40	ATOM	103	CD	GLN	A	44	25.078	45.482	-11.000	1.00	10.11	A
	ATOM	104	OE1	GLN	A	44	24.107	46.144	-11.348	1.00	10.00	A
	ATOM	105	NE2	GLN	A	44	26.255	46.028	-10.708	1.00	9.62	A
	ATOM	106	C	GLN	A	44	23.409	45.489	-8.282	1.00	9.74	A
	ATOM	107	O	GLN	A	44	22.203	45.562	-8.488	1.00	9.41	A
45	ATOM	108	N	MSE	A	45	24.125	46.526	-7.866	1.00	9.19	A
	ATOM	109	CA	MSE	A	45	23.488	47.795	-7.559	1.00	9.37	A
	ATOM	110	CB	MSE	A	45	24.531	48.784	-7.035	1.00	10.21	A
	ATOM	111	CG	MSE	A	45	25.149	48.353	-5.699	1.00	11.50	A
	ATOM	112	SE	MSE	A	45	23.842	47.932	-4.319	1.00	18.05	A
50	ATOM	113	CE	MSE	A	45	23.146	49.711	-4.052	1.00	15.91	A
	ATOM	114	C	MSE	A	45	22.606	48.459	-8.606	1.00	8.92	A
	ATOM	115	O	MSE	A	45	21.614	49.094	-8.245	1.00	9.44	A
	ATOM	116	N	LEU	A	46	22.942	48.327	-9.886	1.00	9.08	A
	ATOM	117	CA	LEU	A	46	22.108	48.933	-10.923	1.00	9.97	A
55	ATOM	118	CB	LEU	A	46	22.793	48.872	-12.294	1.00	10.46	A
	ATOM	119	CG	LEU	A	46	22.050	49.591	-13.430	1.00	10.75	A
	ATOM	120	CD1	LEU	A	46	22.054	51.101	-13.186	1.00	11.00	A
	ATOM	121	CD2	LEU	A	46	22.706	49.268	-14.760	1.00	10.73	A
	ATOM	122	C	LEU	A	46	20.783	48.174	-10.974	1.00	10.31	A

5	ATOM	123	O	LEU	A	46	19.716	48.773	-11.109	1.00	9.89	A
	ATOM	124	N	GLU	A	47	20.860	46.853	-10.848	1.00	11.31	A
	ATOM	125	CA	GLU	A	47	19.662	46.020	-10.880	1.00	12.80	A
	ATOM	126	CB	GLU	A	47	20.050	44.538	-10.943	1.00	13.61	A
	ATOM	127	CG	GLU	A	47	18.875	43.590	-11.181	1.00	16.25	A
10	ATOM	128	CD	GLU	A	47	18.100	43.257	-9.920	1.00	18.05	A
	ATOM	129	OE1	GLU	A	47	16.963	42.754	-10.042	1.00	20.21	A
	ATOM	130	OE2	GLU	A	47	18.622	43.479	-8.809	1.00	18.69	A
	ATOM	131	C	GLU	A	47	18.810	46.295	-9.648	1.00	12.80	A
	ATOM	132	O	GLU	A	47	17.586	46.385	-9.736	1.00	12.50	A
15	ATOM	133	N	LEU	A	48	19.460	46.444	-8.499	1.00	12.14	A
	ATOM	134	CA	LEU	A	48	18.740	46.716	-7.263	1.00	12.63	A
	ATOM	135	CB	LEU	A	48	19.705	46.729	-6.076	1.00	14.14	A
	ATOM	136	CG	LEU	A	48	19.055	46.870	-4.697	1.00	15.25	A
	ATOM	137	CD1	LEU	A	48	18.053	45.745	-4.474	1.00	16.69	A
20	ATOM	138	CD2	LEU	A	48	20.130	46.847	-3.620	1.00	16.69	A
	ATOM	139	C	LEU	A	48	18.019	48.057	-7.367	1.00	12.34	A
	ATOM	140	O	LEU	A	48	16.863	48.187	-6.966	1.00	12.49	A
	ATOM	141	N	TYR	A	49	18.704	49.054	-7.918	1.00	11.81	A
	ATOM	142	CA	TYR	A	49	18.113	50.376	-8.081	1.00	12.23	A
25	ATOM	143	CB	TYR	A	49	19.149	51.349	-8.666	1.00	11.90	A
	ATOM	144	CG	TYR	A	49	19.709	52.296	-7.630	1.00	10.96	A
	ATOM	145	CD1	TYR	A	49	20.175	51.815	-6.403	1.00	10.54	A
	ATOM	146	CE1	TYR	A	49	20.626	52.679	-5.416	1.00	10.82	A
	ATOM	147	CD2	TYR	A	49	19.719	53.674	-7.847	1.00	10.08	A
30	ATOM	148	CE2	TYR	A	49	20.170	54.552	-6.863	1.00	10.64	A
	ATOM	149	CZ	TYR	A	49	20.617	54.046	-5.649	1.00	9.91	A
	ATOM	150	OH	TYR	A	49	21.025	54.902	-4.653	1.00	10.90	A
	ATOM	151	C	TYR	A	49	16.874	50.330	-8.972	1.00	12.98	A
	ATOM	152	O	TYR	A	49	15.900	51.047	-8.740	1.00	13.38	A
35	ATOM	153	N	ASP	A	50	16.910	49.470	-9.983	1.00	13.83	A
	ATOM	154	CA	ASP	A	50	15.793	49.339	-10.910	1.00	15.90	A
	ATOM	155	CB	ASP	A	50	16.187	48.407	-12.060	1.00	16.89	A
	ATOM	156	CG	ASP	A	50	15.410	48.680	-13.334	1.00	18.91	A
	ATOM	157	OD1	ASP	A	50	15.524	47.869	-14.279	1.00	21.08	A
40	ATOM	158	OD2	ASP	A	50	14.698	49.705	-13.401	1.00	19.63	A
	ATOM	159	C	ASP	A	50	14.555	48.792	-10.194	1.00	16.66	A
	ATOM	160	O	ASP	A	50	13.430	49.204	-10.484	1.00	16.29	A
	ATOM	161	N	ARG	A	51	14.772	47.882	-9.248	1.00	17.87	A
	ATOM	162	CA	ARG	A	51	13.678	47.256	-8.501	1.00	19.68	A
45	ATOM	163	CB	ARG	A	51	14.072	45.836	-8.075	1.00	22.37	A
	ATOM	164	CG	ARG	A	51	14.210	44.853	-9.219	1.00	26.10	A
	ATOM	165	CD	ARG	A	51	14.327	43.409	-8.730	1.00	29.22	A
	ATOM	166	NE	ARG	A	51	15.547	43.159	-7.964	1.00	31.13	A
	ATOM	167	CZ	ARG	A	51	15.681	43.377	-6.659	1.00	32.25	A
50	ATOM	168	NH1	ARG	A	51	14.665	43.851	-5.950	1.00	33.45	A
	ATOM	169	NH2	ARG	A	51	16.838	43.121	-6.063	1.00	32.60	A
	ATOM	170	C	ARG	A	51	13.182	48.008	-7.267	1.00	19.33	A
	ATOM	171	O	ARG	A	51	11.999	47.938	-6.935	1.00	20.01	A
	ATOM	172	N	MSE	A	52	14.080	48.708	-6.582	1.00	19.03	A
55	ATOM	173	CA	MSE	A	52	13.722	49.450	-5.374	1.00	19.27	A
	ATOM	174	CB	MSE	A	52	14.976	50.053	-4.742	1.00	20.66	A
	ATOM	175	CG	MSE	A	52	15.912	49.042	-4.122	1.00	22.65	A
	ATOM	176	SE	MSE	A	52	17.569	49.884	-3.600	1.00	27.63	A
	ATOM	177	CE	MSE	A	52	16.866	51.229	-2.405	1.00	24.75	A

5	ATOM	178	C	MSE	A	52	12.698	50.557	-5.597	1.00	18.62	A
	ATOM	179	O	MSE	A	52	12.690	51.209	-6.640	1.00	18.85	A
	ATOM	180	N	SER	A	53	11.850	50.777	-4.595	1.00	18.04	A
	ATOM	181	CA	SER	A	53	10.814	51.805	-4.673	1.00	18.07	A
	ATOM	182	CB	SER	A	53	9.525	51.291	-4.028	1.00	19.37	A
10	ATOM	183	OG	SER	A	53	9.062	50.124	-4.689	1.00	21.66	A
	ATOM	184	C	SER	A	53	11.233	53.118	-4.010	1.00	17.33	A
	ATOM	185	O	SER	A	53	10.615	54.158	-4.235	1.00	17.18	A
	ATOM	186	N	PHE	A	54	12.276	53.058	-3.188	1.00	16.61	A
	ATOM	187	CA	PHE	A	54	12.800	54.229	-2.488	1.00	16.04	A
15	ATOM	188	CB	PHE	A	54	13.474	55.196	-3.474	1.00	15.36	A
	ATOM	189	CG	PHE	A	54	14.708	54.642	-4.140	1.00	13.72	A
	ATOM	190	CD1	PHE	A	54	14.604	53.800	-5.242	1.00	13.06	A
	ATOM	191	CD2	PHE	A	54	15.973	54.979	-3.672	1.00	13.80	A
	ATOM	192	CE1	PHE	A	54	15.745	53.301	-5.874	1.00	13.32	A
20	ATOM	193	CE2	PHE	A	54	17.121	54.488	-4.294	1.00	13.91	A
	ATOM	194	CZ	PHE	A	54	17.006	53.646	-5.400	1.00	13.56	A
	ATOM	195	C	PHE	A	54	11.760	55.008	-1.680	1.00	16.83	A
	ATOM	196	O	PHE	A	54	11.858	56.228	-1.555	1.00	16.55	A
	ATOM	197	N	LYS	A	55	10.768	54.319	-1.126	1.00	17.41	A
25	ATOM	198	CA	LYS	A	55	9.757	55.016	-0.337	1.00	19.14	A
	ATOM	199	CB	LYS	A	55	8.554	54.107	-0.078	1.00	19.64	A
	ATOM	200	CG	LYS	A	55	7.836	53.664	-1.343	1.00	20.85	A
	ATOM	201	CD	LYS	A	55	7.418	54.851	-2.206	1.00	22.09	A
	ATOM	202	CE	LYS	A	55	6.676	54.383	-3.454	1.00	23.32	A
30	ATOM	203	NZ	LYS	A	55	6.271	55.511	-4.340	1.00	24.17	A
	ATOM	204	C	LYS	A	55	10.354	55.486	0.985	1.00	19.50	A
	ATOM	205	O	LYS	A	55	11.028	54.726	1.679	1.00	20.05	A
	ATOM	206	N	ASP	A	56	10.102	56.745	1.324	1.00	19.60	A
	ATOM	207	CA	ASP	A	56	10.622	57.341	2.549	1.00	20.15	A
35	ATOM	208	CB	ASP	A	56	11.139	58.753	2.240	1.00	19.39	A
	ATOM	209	CG	ASP	A	56	11.741	59.441	3.450	1.00	19.05	A
	ATOM	210	OD1	ASP	A	56	12.273	58.744	4.338	1.00	19.04	A
	ATOM	211	OD2	ASP	A	56	11.697	60.689	3.503	1.00	19.38	A
	ATOM	212	C	ASP	A	56	9.551	57.383	3.635	1.00	20.95	A
40	ATOM	213	O	ASP	A	56	8.972	58.432	3.912	1.00	21.55	A
	ATOM	214	N	ILE	A	57	9.295	56.236	4.254	1.00	21.88	A
	ATOM	215	CA	ILE	A	57	8.283	56.158	5.301	1.00	22.85	A
	ATOM	216	CB	ILE	A	57	7.404	54.895	5.141	1.00	24.33	A
	ATOM	217	CG2	ILE	A	57	6.848	54.823	3.723	1.00	24.60	A
45	ATOM	218	CG1	ILE	A	57	8.224	53.639	5.437	1.00	25.50	A
	ATOM	219	CD1	ILE	A	57	7.404	52.363	5.446	1.00	26.92	A
	ATOM	220	C	ILE	A	57	8.897	56.146	6.695	1.00	22.59	A
	ATOM	221	O	ILE	A	57	10.038	55.722	6.881	1.00	22.42	A
	ATOM	222	N	ASP	A	58	8.128	56.623	7.669	1.00	22.17	A
50	ATOM	223	CA	ASP	A	58	8.566	56.667	9.059	1.00	21.75	A
	ATOM	224	CB	ASP	A	58	7.605	57.538	9.873	1.00	22.45	A
	ATOM	225	CG	ASP	A	58	8.017	57.674	11.327	1.00	23.28	A
	ATOM	226	OD1	ASP	A	58	7.417	58.514	12.033	1.00	24.70	A
	ATOM	227	OD2	ASP	A	58	8.929	56.948	11.771	1.00	22.76	A
55	ATOM	228	C	ASP	A	58	8.580	55.243	9.604	1.00	21.36	A
	ATOM	229	O	ASP	A	58	7.528	54.637	9.801	1.00	20.84	A
	ATOM	230	N	GLY	A	59	9.775	54.712	9.842	1.00	19.94	A
	ATOM	231	CA	GLY	A	59	9.887	53.355	10.346	1.00	19.09	A
	ATOM	232	C	GLY	A	59	9.859	53.221	11.858	1.00	18.34	A

5	ATOM	233	O	GLY	A	59	10.062	52.128	12.383	1.00	18.39	A
	ATOM	234	N	GLY	A	60	9.605	54.321	12.559	1.00	17.94	A
	ATOM	235	CA	GLY	A	60	9.567	54.280	14.012	1.00	17.49	A
	ATOM	236	C	GLY	A	60	10.801	54.927	14.615	1.00	16.45	A
	ATOM	237	O	GLY	A	60	11.318	55.898	14.062	1.00	17.23	A
10	ATOM	238	N	VAL	A	61	11.273	54.405	15.747	1.00	16.17	A
	ATOM	239	CA	VAL	A	61	12.464	54.962	16.383	1.00	15.12	A
	ATOM	240	CB	VAL	A	61	12.836	54.209	17.683	1.00	15.83	A
	ATOM	241	CG1	VAL	A	61	11.775	54.473	18.746	1.00	15.81	A
	ATOM	242	CG2	VAL	A	61	12.964	52.721	17.418	1.00	16.10	A
15	ATOM	243	C	VAL	A	61	13.618	54.907	15.385	1.00	14.48	A
	ATOM	244	O	VAL	A	61	14.481	55.784	15.373	1.00	13.96	A
	ATOM	245	N	TRP	A	62	13.641	53.863	14.561	1.00	14.06	A
	ATOM	246	CA	TRP	A	62	14.645	53.770	13.507	1.00	13.87	A
	ATOM	247	CB	TRP	A	62	15.020	52.316	13.194	1.00	13.36	A
20	ATOM	248	CG	TRP	A	62	15.986	52.190	12.037	1.00	12.76	A
	ATOM	249	CD2	TRP	A	62	16.349	50.990	11.343	1.00	12.39	A
	ATOM	250	CE2	TRP	A	62	17.259	51.355	10.322	1.00	12.49	A
	ATOM	251	CE3	TRP	A	62	15.994	49.640	11.483	1.00	11.15	A
	ATOM	252	CD1	TRP	A	62	16.676	53.205	11.427	1.00	12.72	A
25	ATOM	253	NE1	TRP	A	62	17.438	52.711	10.396	1.00	12.59	A
	ATOM	254	CZ2	TRP	A	62	17.817	50.420	9.444	1.00	12.40	A
	ATOM	255	CZ3	TRP	A	62	16.550	48.708	10.610	1.00	12.01	A
	ATOM	256	CH2	TRP	A	62	17.452	49.105	9.602	1.00	11.99	A
	ATOM	257	C	TRP	A	62	13.846	54.378	12.361	1.00	14.13	A
30	ATOM	258	O	TRP	A	62	13.164	53.677	11.615	1.00	14.64	A
	ATOM	259	N	LYS	A	63	13.923	55.700	12.255	1.00	14.09	A
	ATOM	260	CA	LYS	A	63	13.170	56.456	11.262	1.00	14.88	A
	ATOM	261	CB	LYS	A	63	13.613	57.922	11.290	1.00	15.30	A
	ATOM	262	CG	LYS	A	63	13.218	58.676	12.559	1.00	18.82	A
35	ATOM	263	CD	LYS	A	63	11.705	58.848	12.658	1.00	20.72	A
	ATOM	264	CE	LYS	A	63	11.305	59.678	13.873	1.00	23.06	A
	ATOM	265	NZ	LYS	A	63	11.653	59.027	15.170	1.00	24.73	A
	ATOM	266	C	LYS	A	63	13.187	55.954	9.826	1.00	14.71	A
	ATOM	267	O	LYS	A	63	12.175	56.038	9.129	1.00	15.50	A
40	ATOM	268	N	GLN	A	64	14.320	55.430	9.378	1.00	13.97	A
	ATOM	269	CA	GLN	A	64	14.419	54.964	8.001	1.00	13.67	A
	ATOM	270	CB	GLN	A	64	15.635	55.615	7.344	1.00	13.23	A
	ATOM	271	CG	GLN	A	64	15.555	57.133	7.373	1.00	12.86	A
	ATOM	272	CD	GLN	A	64	16.908	57.787	7.211	1.00	11.84	A
45	ATOM	273	OE1	GLN	A	64	17.851	57.465	7.933	1.00	13.01	A
	ATOM	274	NE2	GLN	A	64	17.011	58.718	6.265	1.00	12.04	A
	ATOM	275	C	GLN	A	64	14.472	53.449	7.856	1.00	13.24	A
	ATOM	276	O	GLN	A	64	14.847	52.929	6.805	1.00	13.10	A
	ATOM	277	N	GLY	A	65	14.076	52.749	8.915	1.00	13.24	A
50	ATOM	278	CA	GLY	A	65	14.064	51.297	8.887	1.00	13.74	A
	ATOM	279	C	GLY	A	65	12.710	50.744	9.298	1.00	14.46	A
	ATOM	280	O	GLY	A	65	11.687	51.085	8.703	1.00	14.40	A
	ATOM	281	N	TRP	A	66	12.709	49.889	10.316	1.00	14.87	A
	ATOM	282	CA	TRP	A	66	11.482	49.283	10.830	1.00	15.41	A
55	ATOM	283	CB	TRP	A	66	11.106	48.058	9.987	1.00	15.37	A
	ATOM	284	CG	TRP	A	66	12.040	46.889	10.153	1.00	15.33	A
	ATOM	285	CD2	TRP	A	66	13.248	46.644	9.422	1.00	15.00	A
	ATOM	286	CE2	TRP	A	66	13.804	45.445	9.923	1.00	14.98	A
	ATOM	287	CE3	TRP	A	66	13.915	47.321	8.391	1.00	14.47	A

5	ATOM	288	CD1	TRP	A	66	11.918	45.861	11.043	1.00	15.31	A
	ATOM	289	NE1	TRP	A	66	12.972	44.988	10.911	1.00	16.13	A
	ATOM	290	CZ2	TRP	A	66	14.998	44.907	9.429	1.00	14.84	A
	ATOM	291	CZ3	TRP	A	66	15.105	46.785	7.900	1.00	14.49	A
	ATOM	292	CH2	TRP	A	66	15.633	45.589	8.421	1.00	14.85	A
10	ATOM	293	C	TRP	A	66	11.751	48.864	12.271	1.00	15.70	A
	ATOM	294	O	TRP	A	66	12.888	48.946	12.734	1.00	15.45	A
	ATOM	295	N	ASN	A	67	10.717	48.428	12.985	1.00	16.28	A
	ATOM	296	CA	ASN	A	67	10.899	47.991	14.368	1.00	16.95	A
	ATOM	297	CB	ASN	A	67	9.564	47.958	15.119	1.00	19.00	A
15	ATOM	298	CG	ASN	A	67	8.948	49.331	15.270	1.00	20.01	A
	ATOM	299	OD1	ASN	A	67	9.638	50.304	15.574	1.00	22.02	A
	ATOM	300	ND2	ASN	A	67	7.637	49.417	15.071	1.00	22.35	A
	ATOM	301	C	ASN	A	67	11.517	46.599	14.371	1.00	16.92	A
	ATOM	302	O	ASN	A	67	10.837	45.604	14.111	1.00	16.93	A
20	ATOM	303	N	ILE	A	68	12.809	46.533	14.669	1.00	16.90	A
	ATOM	304	CA	ILE	A	68	13.518	45.262	14.681	1.00	17.11	A
	ATOM	305	CB	ILE	A	68	15.043	45.472	14.801	1.00	16.47	A
	ATOM	306	CG2	ILE	A	68	15.759	44.130	14.753	1.00	17.44	A
	ATOM	307	CG1	ILE	A	68	15.538	46.370	13.664	1.00	16.41	A
25	ATOM	308	CD1	ILE	A	68	17.000	46.764	13.794	1.00	15.35	A
	ATOM	309	C	ILE	A	68	13.066	44.365	15.824	1.00	18.00	A
	ATOM	310	O	ILE	A	68	12.954	44.804	16.968	1.00	17.72	A
	ATOM	311	N	LYS	A	69	12.804	43.106	15.497	1.00	19.17	A
	ATOM	312	CA	LYS	A	69	12.387	42.127	16.488	1.00	20.70	A
30	ATOM	313	CB	LYS	A	69	10.977	41.616	16.171	1.00	22.97	A
	ATOM	314	CG	LYS	A	69	9.890	42.661	16.395	1.00	25.78	A
	ATOM	315	CD	LYS	A	69	8.500	42.137	16.054	1.00	28.76	A
	ATOM	316	CE	LYS	A	69	8.355	41.859	14.566	1.00	29.99	A
	ATOM	317	NZ	LYS	A	69	6.952	41.507	14.203	1.00	31.16	A
35	ATOM	318	C	LYS	A	69	13.386	40.981	16.465	1.00	20.51	A
	ATOM	319	O	LYS	A	69	13.944	40.659	15.416	1.00	20.04	A
	ATOM	320	N	TYR	A	70	13.630	40.378	17.623	1.00	20.85	A
	ATOM	321	CA	TYR	A	70	14.568	39.268	17.702	1.00	21.35	A
	ATOM	322	CB	TYR	A	70	15.959	39.770	18.116	1.00	20.92	A
40	ATOM	323	CG	TYR	A	70	16.035	40.362	19.508	1.00	20.30	A
	ATOM	324	CD1	TYR	A	70	16.151	39.544	20.634	1.00	20.51	A
	ATOM	325	CE1	TYR	A	70	16.223	40.089	21.915	1.00	20.34	A
	ATOM	326	CD2	TYR	A	70	15.989	41.741	19.700	1.00	20.52	A
	ATOM	327	CE2	TYR	A	70	16.059	42.295	20.974	1.00	20.68	A
45	ATOM	328	CZ	TYR	A	70	16.175	41.466	22.076	1.00	20.53	A
	ATOM	329	OH	TYR	A	70	16.238	42.018	23.334	1.00	21.78	A
	ATOM	330	C	TYR	A	70	14.082	38.215	18.685	1.00	22.16	A
	ATOM	331	O	TYR	A	70	13.295	38.506	19.587	1.00	22.38	A
	ATOM	332	N	ASP	A	71	14.548	36.988	18.493	1.00	23.35	A
50	ATOM	333	CA	ASP	A	71	14.179	35.885	19.366	1.00	24.52	A
	ATOM	334	CB	ASP	A	71	14.123	34.585	18.560	1.00	25.65	A
	ATOM	335	CG	ASP	A	71	13.887	33.368	19.431	1.00	26.58	A
	ATOM	336	OD1	ASP	A	71	13.235	33.505	20.487	1.00	27.68	A
	ATOM	337	OD2	ASP	A	71	14.345	32.271	19.047	1.00	28.15	A
55	ATOM	338	C	ASP	A	71	15.219	35.792	20.477	1.00	25.08	A
	ATOM	339	O	ASP	A	71	16.368	35.427	20.234	1.00	25.05	A
	ATOM	340	N	PRO	A	72	14.825	36.126	21.716	1.00	25.93	A
	ATOM	341	CD	PRO	A	72	13.445	36.362	22.173	1.00	25.99	A
	ATOM	342	CA	PRO	A	72	15.746	36.077	22.855	1.00	26.65	A

	ATOM	343	CB	PRO	A	72	14.839	36.385	24.048	1.00	26.60	A
	ATOM	344	CG	PRO	A	72	13.502	35.879	23.600	1.00	26.93	A
	ATOM	345	C	PRO	A	72	16.481	34.750	23.002	1.00	26.94	A
5	ATOM	346	O	PRO	A	72	17.587	34.701	23.540	1.00	27.06	A
	ATOM	347	N	LEU	A	73	15.869	33.679	22.507	1.00	27.10	A
	ATOM	348	CA	LEU	A	73	16.465	32.353	22.595	1.00	27.36	A
	ATOM	349	CB	LEU	A	73	15.371	31.285	22.502	1.00	28.10	A
	ATOM	350	CG	LEU	A	73	14.303	31.343	23.599	1.00	28.89	A
10	ATOM	351	CD1	LEU	A	73	13.227	30.303	23.328	1.00	29.29	A
	ATOM	352	CD2	LEU	A	73	14.951	31.109	24.958	1.00	29.04	A
	ATOM	353	C	LEU	A	73	17.522	32.105	21.521	1.00	27.02	A
	ATOM	354	O	LEU	A	73	18.121	31.031	21.468	1.00	26.79	A
	ATOM	355	N	LYS	A	74	17.756	33.099	20.669	1.00	26.77	A
15	ATOM	356	CA	LYS	A	74	18.748	32.960	19.611	1.00	27.29	A
	ATOM	357	CB	LYS	A	74	18.743	34.193	18.707	1.00	28.07	A
	ATOM	358	CG	LYS	A	74	19.729	34.113	17.553	1.00	29.63	A
	ATOM	359	CD	LYS	A	74	19.556	35.284	16.603	1.00	30.36	A
	ATOM	360	CE	LYS	A	74	20.482	35.162	15.405	1.00	31.13	A
20	ATOM	361	NZ	LYS	A	74	20.256	36.260	14.427	1.00	31.11	A
	ATOM	362	C	LYS	A	74	20.141	32.762	20.200	1.00	27.08	A
	ATOM	363	O	LYS	A	74	20.942	31.990	19.678	1.00	26.39	A
	ATOM	364	N	TYR	A	75	20.428	33.470	21.286	1.00	27.82	A
	ATOM	365	CA	TYR	A	75	21.724	33.347	21.936	1.00	28.44	A
25	ATOM	366	CB	TYR	A	75	22.359	34.730	22.130	1.00	28.35	A
	ATOM	367	CG	TYR	A	75	22.677	35.420	20.821	1.00	28.28	A
	ATOM	368	CD1	TYR	A	75	21.796	36.346	20.261	1.00	28.89	A
	ATOM	369	CE1	TYR	A	75	22.058	36.931	19.021	1.00	28.65	A
	ATOM	370	CD2	TYR	A	75	23.832	35.098	20.111	1.00	28.33	A
30	ATOM	371	CE2	TYR	A	75	24.101	35.673	18.872	1.00	29.04	A
	ATOM	372	CZ	TYR	A	75	23.211	36.585	18.333	1.00	28.89	A
	ATOM	373	OH	TYR	A	75	23.471	37.131	17.095	1.00	29.25	A
	ATOM	374	C	TYR	A	75	21.577	32.634	23.274	1.00	29.07	A
	ATOM	375	O	TYR	A	75	20.599	32.840	23.992	1.00	29.15	A
35	ATOM	376	N	ASN	A	76	22.547	31.782	23.591	1.00	29.40	A
	ATOM	377	CA	ASN	A	76	22.533	31.029	24.839	1.00	30.49	A
	ATOM	378	CB	ASN	A	76	21.742	29.729	24.668	1.00	31.72	A
	ATOM	379	CG	ASN	A	76	22.463	28.717	23.804	1.00	32.78	A
	ATOM	380	OD1	ASN	A	76	22.765	28.979	22.643	1.00	33.93	A
40	ATOM	381	ND2	ASN	A	76	22.746	27.550	24.372	1.00	34.66	A
	ATOM	382	C	ASN	A	76	23.962	30.710	25.265	1.00	30.43	A
	ATOM	383	O	ASN	A	76	24.919	31.143	24.626	1.00	29.75	A
	ATOM	384	N	ALA	A	77	24.101	29.945	26.343	1.00	30.87	A
	ATOM	385	CA	ALA	A	77	25.416	29.580	26.857	1.00	31.38	A
45	ATOM	386	CB	ALA	A	77	25.264	28.622	28.033	1.00	31.94	A
	ATOM	387	C	ALA	A	77	26.316	28.957	25.794	1.00	31.58	A
	ATOM	388	O	ALA	A	77	27.535	29.119	25.834	1.00	31.89	A
	ATOM	389	N	HIS	A	78	25.715	28.252	24.841	1.00	31.69	A
	ATOM	390	CA	HIS	A	78	26.481	27.599	23.785	1.00	31.63	A
50	ATOM	391	CB	HIS	A	78	25.811	26.278	23.399	1.00	33.87	A
	ATOM	392	CG	HIS	A	78	25.580	25.359	24.557	1.00	35.97	A
	ATOM	393	CD2	HIS	A	78	24.448	24.784	25.028	1.00	36.95	A
	ATOM	394	ND1	HIS	A	78	26.597	24.938	25.388	1.00	37.02	A
	ATOM	395	CE1	HIS	A	78	26.101	24.144	26.320	1.00	37.60	A
	ATOM	396	NE2	HIS	A	78	24.799	24.034	26.124	1.00	37.80	A
55	ATOM	397	C	HIS	A	78	26.646	28.470	22.545	1.00	30.07	A

5	ATOM	398	O	HIS	A	78	27.360	28.103	21.612	1.00	30.09	A
	ATOM	399	N	HIS	A	79	25.989	29.625	22.541	1.00	27.75	A
	ATOM	400	CA	HIS	A	79	26.066	30.541	21.409	1.00	25.19	A
	ATOM	401	CB	HIS	A	79	25.030	30.141	20.354	1.00	25.68	A
	ATOM	402	CG	HIS	A	79	25.122	30.926	19.082	1.00	25.61	A
	ATOM	403	CD2	HIS	A	79	25.873	30.737	17.971	1.00	25.84	A
	ATOM	404	ND1	HIS	A	79	24.386	32.069	18.856	1.00	26.22	A
	ATOM	405	CE1	HIS	A	79	24.679	32.549	17.661	1.00	25.96	A
	ATOM	406	NE2	HIS	A	79	25.579	31.759	17.103	1.00	25.37	A
	ATOM	407	C	HIS	A	79	25.822	31.965	21.897	1.00	22.98	A
10	ATOM	408	O	HIS	A	79	24.692	32.449	21.906	1.00	22.36	A
	ATOM	409	N	LYS	A	80	26.899	32.626	22.307	1.00	20.90	A
	ATOM	410	CA	LYS	A	80	26.821	33.985	22.825	1.00	19.06	A
	ATOM	411	CB	LYS	A	80	27.850	34.187	23.937	1.00	20.08	A
15	ATOM	412	CG	LYS	A	80	27.757	33.211	25.095	1.00	21.73	A
	ATOM	413	CD	LYS	A	80	28.851	33.513	26.106	1.00	23.84	A
	ATOM	414	CE	LYS	A	80	28.813	32.556	27.283	1.00	25.02	A
	ATOM	415	NZ	LYS	A	80	29.906	32.856	28.253	1.00	26.36	A
20	ATOM	416	C	LYS	A	80	27.071	35.042	21.761	1.00	17.49	A
	ATOM	417	O	LYS	A	80	27.679	34.772	20.726	1.00	17.57	A
	ATOM	418	N	LEU	A	81	26.596	36.251	22.035	1.00	14.89	A
	ATOM	419	CA	LEU	A	81	26.796	37.376	21.134	1.00	13.66	A
25	ATOM	420	CB	LEU	A	81	25.622	38.352	21.223	1.00	13.09	A
	ATOM	421	CG	LEU	A	81	25.728	39.609	20.349	1.00	12.56	A
	ATOM	422	CD1	LEU	A	81	25.752	39.205	18.874	1.00	13.02	A
	ATOM	423	CD2	LEU	A	81	24.553	40.541	20.631	1.00	14.10	A
30	ATOM	424	C	LEU	A	81	28.075	38.067	21.594	1.00	14.00	A
	ATOM	425	O	LEU	A	81	28.161	38.525	22.733	1.00	13.98	A
	ATOM	426	N	LYS	A	82	29.070	38.121	20.714	1.00	12.74	A
	ATOM	427	CA	LYS	A	82	30.344	38.759	21.028	1.00	13.21	A
35	ATOM	428	CB	LYS	A	82	31.487	38.017	20.328	1.00	15.38	A
	ATOM	429	CG	LYS	A	82	31.631	36.570	20.782	1.00	19.55	A
	ATOM	430	CD	LYS	A	82	32.517	35.748	19.852	1.00	22.61	A
	ATOM	431	CE	LYS	A	82	33.960	36.225	19.859	1.00	24.15	A
40	ATOM	432	NZ	LYS	A	82	34.815	35.366	18.989	1.00	26.27	A
	ATOM	433	C	LYS	A	82	30.253	40.191	20.533	1.00	12.63	A
	ATOM	434	O	LYS	A	82	30.047	40.427	19.343	1.00	13.50	A
	ATOM	435	N	VAL	A	83	30.399	41.142	21.451	1.00	11.19	A
45	ATOM	436	CA	VAL	A	83	30.296	42.553	21.112	1.00	11.54	A
	ATOM	437	CB	VAL	A	83	29.237	43.245	22.000	1.00	10.36	A
	ATOM	438	CG1	VAL	A	83	29.078	44.708	21.601	1.00	10.99	A
	ATOM	439	CG2	VAL	A	83	27.911	42.516	21.873	1.00	11.60	A
50	ATOM	440	C	VAL	A	83	31.613	43.300	21.260	1.00	11.60	A
	ATOM	441	O	VAL	A	83	32.242	43.278	22.318	1.00	11.88	A
	ATOM	442	N	PHE	A	84	32.023	43.969	20.187	1.00	10.64	A
	ATOM	443	CA	PHE	A	84	33.247	44.753	20.206	1.00	11.09	A
55	ATOM	444	CB	PHE	A	84	34.150	44.394	19.025	1.00	12.04	A
	ATOM	445	CG	PHE	A	84	34.799	43.048	19.144	1.00	12.77	A
	ATOM	446	CD1	PHE	A	84	34.299	41.954	18.450	1.00	13.33	A
	ATOM	447	CD2	PHE	A	84	35.915	42.876	19.955	1.00	14.39	A
	ATOM	448	CE1	PHE	A	84	34.903	40.702	18.561	1.00	15.01	A
	ATOM	449	CE2	PHE	A	84	36.528	41.632	20.076	1.00	14.37	A
	ATOM	450	CZ	PHE	A	84	36.020	40.542	19.375	1.00	14.86	A
	ATOM	451	C	PHE	A	84	32.901	46.234	20.135	1.00	10.24	A
	ATOM	452	O	PHE	A	84	32.378	46.706	19.125	1.00	10.64	A

5	ATOM	453	N	VAL	A	85	33.172	46.952	21.222	1.00	9.19	A
	ATOM	454	CA	VAL	A	85	32.933	48.389	21.287	1.00	9.61	A
	ATOM	455	CB	VAL	A	85	32.563	48.823	22.718	1.00	8.87	A
	ATOM	456	CG1	VAL	A	85	32.403	50.334	22.787	1.00	10.61	A
	ATOM	457	CG2	VAL	A	85	31.269	48.132	23.138	1.00	10.27	A
10	ATOM	458	C	VAL	A	85	34.258	49.012	20.865	1.00	8.92	A
	ATOM	459	O	VAL	A	85	35.274	48.855	21.546	1.00	9.82	A
	ATOM	460	N	VAL	A	86	34.236	49.716	19.735	1.00	7.99	A
	ATOM	461	CA	VAL	A	86	35.438	50.310	19.161	1.00	8.62	A
	ATOM	462	CB	VAL	A	86	35.561	49.893	17.675	1.00	8.93	A
15	ATOM	463	CG1	VAL	A	86	36.882	50.390	17.093	1.00	9.60	A
	ATOM	464	CG2	VAL	A	86	35.458	48.373	17.557	1.00	10.05	A
	ATOM	465	C	VAL	A	86	35.499	51.833	19.267	1.00	7.68	A
	ATOM	466	O	VAL	A	86	34.862	52.551	18.489	1.00	7.87	A
	ATOM	467	N	PRO	A	87	36.282	52.348	20.230	1.00	8.07	A
20	ATOM	468	CD	PRO	A	87	36.951	51.612	21.316	1.00	8.47	A
	ATOM	469	CA	PRO	A	87	36.420	53.795	20.423	1.00	8.11	A
	ATOM	470	CB	PRO	A	87	37.274	53.896	21.690	1.00	8.31	A
	ATOM	471	CG	PRO	A	87	36.939	52.630	22.428	1.00	9.52	A
	ATOM	472	C	PRO	A	87	37.109	54.437	19.222	1.00	8.18	A
25	ATOM	473	O	PRO	A	87	38.100	53.906	18.716	1.00	7.38	A
	ATOM	474	N	HIS	A	88	36.580	55.568	18.766	1.00	7.67	A
	ATOM	475	CA	HIS	A	88	37.169	56.267	17.630	1.00	8.52	A
	ATOM	476	CB	HIS	A	88	36.613	55.709	16.308	1.00	8.65	A
	ATOM	477	CG	HIS	A	88	35.167	56.015	16.077	1.00	9.36	A
30	ATOM	478	CD2	HIS	A	88	34.045	55.391	16.505	1.00	9.20	A
	ATOM	479	ND1	HIS	A	88	34.744	57.098	15.335	1.00	8.08	A
	ATOM	480	CE1	HIS	A	88	33.423	57.126	15.317	1.00	8.99	A
	ATOM	481	NE2	HIS	A	88	32.974	56.102	16.021	1.00	9.70	A
	ATOM	482	C	HIS	A	88	36.927	57.765	17.718	1.00	9.68	A
35	ATOM	483	O	HIS	A	88	36.108	58.238	18.512	1.00	8.71	A
	ATOM	484	N	SER	A	89	37.661	58.511	16.904	1.00	8.64	A
	ATOM	485	CA	SER	A	89	37.551	59.958	16.889	1.00	8.97	A
	ATOM	486	CB	SER	A	89	38.657	60.562	17.758	1.00	9.29	A
	ATOM	487	OG	SER	A	89	38.626	61.978	17.733	1.00	9.37	A
40	ATOM	488	C	SER	A	89	37.708	60.408	15.449	1.00	8.81	A
	ATOM	489	O	SER	A	89	38.771	60.233	14.856	1.00	8.86	A
	ATOM	490	N	HIS	A	90	36.648	60.971	14.881	1.00	8.95	A
	ATOM	491	CA	HIS	A	90	36.714	61.427	13.499	1.00	8.92	A
	ATOM	492	CB	HIS	A	90	35.313	61.494	12.895	1.00	9.62	A
45	ATOM	493	CG	HIS	A	90	35.310	61.809	11.434	1.00	8.56	A
	ATOM	494	CD2	HIS	A	90	34.836	62.880	10.757	1.00	9.62	A
	ATOM	495	ND1	HIS	A	90	35.874	60.977	10.491	1.00	9.09	A
	ATOM	496	CE1	HIS	A	90	35.748	61.523	9.295	1.00	9.31	A
	ATOM	497	NE2	HIS	A	90	35.122	62.679	9.430	1.00	8.59	A
50	ATOM	498	C	HIS	A	90	37.391	62.792	13.418	1.00	8.62	A
	ATOM	499	O	HIS	A	90	36.849	63.799	13.883	1.00	9.74	A
	ATOM	500	N	ASN	A	91	38.584	62.817	12.829	1.00	9.20	A
	ATOM	501	CA	ASN	A	91	39.354	64.052	12.706	1.00	9.16	A
	ATOM	502	CB	ASN	A	91	40.744	63.867	13.317	1.00	9.59	A
55	ATOM	503	CG	ASN	A	91	40.703	63.716	14.822	1.00	9.87	A
	ATOM	504	OD1	ASN	A	91	40.092	62.787	15.351	1.00	12.09	A
	ATOM	505	ND2	ASN	A	91	41.353	64.633	15.521	1.00	7.48	A
	ATOM	506	C	ASN	A	91	39.504	64.516	11.266	1.00	10.50	A
	ATOM	507	O	ASN	A	91	40.300	63.969	10.503	1.00	11.67	A

5	ATOM	508	N	ASP	A	92	38.738	65.534	10.900	1.00	9.47	A
	ATOM	509	CA	ASP	A	92	38.796	66.078	9.551	1.00	9.42	A
	ATOM	510	CB	ASP	A	92	37.562	66.934	9.282	1.00	9.14	A
	ATOM	511	CG	ASP	A	92	36.314	66.113	9.149	1.00	10.48	A
	ATOM	512	OD1	ASP	A	92	36.328	65.197	8.310	1.00	10.31	A
	ATOM	513	OD2	ASP	A	92	35.328	66.372	9.873	1.00	12.87	A
10	ATOM	514	C	ASP	A	92	40.034	66.930	9.337	1.00	9.30	A
	ATOM	515	O	ASP	A	92	40.256	67.890	10.067	1.00	9.36	A
	ATOM	516	N	PRO	A	93	40.864	66.582	8.338	1.00	9.43	A
	ATOM	517	CD	PRO	A	93	40.895	65.288	7.638	1.00	8.82	A
	ATOM	518	CA	PRO	A	93	42.078	67.351	8.048	1.00	9.47	A
	ATOM	519	CB	PRO	A	93	42.877	66.416	7.140	1.00	9.10	A
15	ATOM	520	CG	PRO	A	93	42.378	65.052	7.507	1.00	11.35	A
	ATOM	521	C	PRO	A	93	41.655	68.632	7.336	1.00	10.26	A
	ATOM	522	O	PRO	A	93	42.020	68.883	6.182	1.00	10.84	A
	ATOM	523	N	GLY	A	94	40.859	69.424	8.048	1.00	9.66	A
	ATOM	524	CA	GLY	A	94	40.336	70.663	7.516	1.00	10.36	A
	ATOM	525	C	GLY	A	94	38.862	70.516	7.177	1.00	10.89	A
20	ATOM	526	O	GLY	A	94	38.440	69.492	6.634	1.00	10.38	A
	ATOM	527	N	TRP	A	95	38.082	71.528	7.538	1.00	10.58	A
	ATOM	528	CA	TRP	A	95	36.653	71.588	7.245	1.00	10.62	A
	ATOM	529	CB	TRP	A	95	35.854	70.479	7.948	1.00	10.51	A
	ATOM	530	CG	TRP	A	95	34.387	70.607	7.634	1.00	11.04	A
	ATOM	531	CD2	TRP	A	95	33.288	70.466	8.545	1.00	11.08	A
25	ATOM	532	CE2	TRP	A	95	32.109	70.765	7.825	1.00	11.49	A
	ATOM	533	CE3	TRP	A	95	33.184	70.120	9.901	1.00	11.93	A
	ATOM	534	CD1	TRP	A	95	33.840	70.963	6.431	1.00	10.57	A
	ATOM	535	NE1	TRP	A	95	32.475	71.065	6.539	1.00	10.89	A
	ATOM	536	CZ2	TRP	A	95	30.839	70.731	8.415	1.00	12.07	A
	ATOM	537	CZ3	TRP	A	95	31.918	70.086	10.487	1.00	12.97	A
30	ATOM	538	CH2	TRP	A	95	30.765	70.391	9.741	1.00	13.12	A
	ATOM	539	C	TRP	A	95	36.151	72.968	7.669	1.00	11.53	A
	ATOM	540	O	TRP	A	95	36.063	73.865	6.834	1.00	10.86	A
	ATOM	541	N	ILE	A	96	35.829	73.151	8.947	1.00	11.91	A
	ATOM	542	CA	ILE	A	96	35.389	74.467	9.405	1.00	13.09	A
	ATOM	543	CB	ILE	A	96	34.240	74.389	10.434	1.00	14.40	A
35	ATOM	544	CG2	ILE	A	96	32.993	73.840	9.758	1.00	15.73	A
	ATOM	545	CG1	ILE	A	96	34.656	73.549	11.638	1.00	16.78	A
	ATOM	546	CD1	ILE	A	96	33.689	73.638	12.798	1.00	18.96	A
	ATOM	547	C	ILE	A	96	36.579	75.207	10.007	1.00	12.25	A
	ATOM	548	O	ILE	A	96	36.486	76.378	10.374	1.00	13.34	A
	ATOM	549	N	GLN	A	97	37.698	74.496	10.102	1.00	11.48	A
40	ATOM	550	CA	GLN	A	97	38.960	75.042	10.585	1.00	10.81	A
	ATOM	551	CB	GLN	A	97	39.239	74.617	12.030	1.00	13.00	A
	ATOM	552	CG	GLN	A	97	38.316	75.252	13.059	1.00	15.72	A
	ATOM	553	CD	GLN	A	97	38.781	75.011	14.481	1.00	18.59	A
	ATOM	554	OE1	GLN	A	97	39.922	75.320	14.834	1.00	21.45	A
	ATOM	555	NE2	GLN	A	97	37.899	74.460	15.309	1.00	20.61	A
45	ATOM	556	C	GLN	A	97	40.007	74.431	9.660	1.00	9.61	A
	ATOM	557	O	GLN	A	97	39.740	73.424	9.007	1.00	9.16	A
	ATOM	558	N	THR	A	98	41.185	75.037	9.580	1.00	9.03	A
	ATOM	559	CA	THR	A	98	42.238	74.487	8.732	1.00	8.85	A
	ATOM	560	CB	THR	A	98	43.363	75.495	8.486	1.00	9.21	A
	ATOM	561	OG1	THR	A	98	43.987	75.813	9.736	1.00	9.92	A
55	ATOM	562	CG2	THR	A	98	42.818	76.769	7.854	1.00	8.60	A

5	ATOM	563	C	THR	A	98	42.862	73.289	9.437	1.00	8.61	A
	ATOM	564	O	THR	A	98	42.598	73.039	10.617	1.00	8.91	A
	ATOM	565	N	PHE	A	99	43.686	72.552	8.704	1.00	8.51	A
	ATOM	566	CA	PHE	A	99	44.377	71.395	9.255	1.00	8.31	A
	ATOM	567	CB	PHE	A	99	45.359	70.837	8.220	1.00	8.62	A
10	ATOM	568	CG	PHE	A	99	46.236	69.737	8.745	1.00	8.46	A
	ATOM	569	CD1	PHE	A	99	45.831	68.407	8.668	1.00	8.79	A
	ATOM	570	CD2	PHE	A	99	47.469	70.031	9.322	1.00	9.06	A
	ATOM	571	CE1	PHE	A	99	46.642	67.383	9.156	1.00	9.28	A
	ATOM	572	CE2	PHE	A	99	48.286	69.020	9.813	1.00	9.90	A
15	ATOM	573	CZ	PHE	A	99	47.873	67.687	9.730	1.00	8.95	A
	ATOM	574	C	PHE	A	99	45.144	71.809	10.509	1.00	8.94	A
	ATOM	575	O	PHE	A	99	45.011	71.193	11.566	1.00	8.71	A
	ATOM	576	N	GLU	A	100	45.948	72.861	10.386	1.00	9.46	A
	ATOM	577	CA	GLU	A	100	46.756	73.331	11.505	1.00	10.17	A
20	ATOM	578	CB	GLU	A	100	47.739	74.405	11.026	1.00	10.59	A
	ATOM	579	CG	GLU	A	100	48.778	74.836	12.059	1.00	12.88	A
	ATOM	580	CD	GLU	A	100	49.649	73.692	12.552	1.00	14.60	A
	ATOM	581	OE1	GLU	A	100	49.825	72.698	11.812	1.00	14.74	A
	ATOM	582	OE2	GLU	A	100	50.177	73.797	13.680	1.00	15.45	A
25	ATOM	583	C	GLU	A	100	45.921	73.854	12.668	1.00	10.39	A
	ATOM	584	O	GLU	A	100	46.275	73.630	13.828	1.00	9.60	A
	ATOM	585	N	GLU	A	101	44.816	74.537	12.369	1.00	10.05	A
	ATOM	586	CA	GLU	A	101	43.952	75.059	13.429	1.00	10.07	A
	ATOM	587	CB	GLU	A	101	42.822	75.918	12.845	1.00	10.88	A
30	ATOM	588	CG	GLU	A	101	43.287	77.260	12.266	1.00	13.03	A
	ATOM	589	CD	GLU	A	101	42.154	78.075	11.658	1.00	14.64	A
	ATOM	590	OE1	GLU	A	101	41.250	77.481	11.036	1.00	13.48	A
	ATOM	591	OE2	GLU	A	101	42.176	79.319	11.788	1.00	17.65	A
	ATOM	592	C	GLU	A	101	43.366	73.901	14.234	1.00	9.98	A
35	ATOM	593	O	GLU	A	101	43.383	73.920	15.468	1.00	9.79	A
	ATOM	594	N	TYR	A	102	42.846	72.892	13.539	1.00	9.17	A
	ATOM	595	CA	TYR	A	102	42.286	71.726	14.222	1.00	9.45	A
	ATOM	596	CB	TYR	A	102	41.704	70.719	13.231	1.00	9.69	A
	ATOM	597	CG	TYR	A	102	40.295	70.970	12.749	1.00	9.66	A
40	ATOM	598	CD1	TYR	A	102	39.247	71.205	13.643	1.00	10.46	A
	ATOM	599	CE1	TYR	A	102	37.928	71.319	13.188	1.00	9.87	A
	ATOM	600	CD2	TYR	A	102	39.989	70.865	11.392	1.00	9.78	A
	ATOM	601	CE2	TYR	A	102	38.688	70.973	10.934	1.00	10.12	A
	ATOM	602	CZ	TYR	A	102	37.661	71.197	11.830	1.00	10.79	A
45	ATOM	603	OH	TYR	A	102	36.374	71.266	11.352	1.00	10.63	A
	ATOM	604	C	TYR	A	102	43.375	71.009	15.008	1.00	10.28	A
	ATOM	605	O	TYR	A	102	43.138	70.515	16.112	1.00	9.91	A
	ATOM	606	N	TYR	A	103	44.567	70.926	14.429	1.00	10.93	A
	ATOM	607	CA	TYR	A	103	45.656	70.245	15.108	1.00	11.21	A
50	ATOM	608	CB	TYR	A	103	46.920	70.226	14.250	1.00	11.30	A
	ATOM	609	CG	TYR	A	103	48.077	69.577	14.968	1.00	11.06	A
	ATOM	610	CD1	TYR	A	103	48.080	68.207	15.224	1.00	11.12	A
	ATOM	611	CE1	TYR	A	103	49.103	67.614	15.954	1.00	10.89	A
	ATOM	612	CD2	TYR	A	103	49.137	70.342	15.460	1.00	11.87	A
55	ATOM	613	CE2	TYR	A	103	50.164	69.760	16.195	1.00	11.51	A
	ATOM	614	CZ	TYR	A	103	50.141	68.397	16.440	1.00	11.95	A
	ATOM	615	OH	TYR	A	103	51.145	67.818	17.187	1.00	13.54	A
	ATOM	616	C	TYR	A	103	45.971	70.909	16.440	1.00	11.40	A
	ATOM	617	O	TYR	A	103	46.092	70.240	17.462	1.00	11.11	A

	ATOM	618	N	GLN	A	104	46.099	72.231	16.422	1.00	11.78	A
	ATOM	619	CA	GLN	A	104	46.419	72.981	17.631	1.00	13.08	A
	ATOM	620	CB	GLN	A	104	46.770	74.427	17.271	1.00	12.77	A
	ATOM	621	CG	GLN	A	104	48.091	74.597	16.541	1.00	13.19	A
5	ATOM	622	CD	GLN	A	104	49.268	74.058	17.336	1.00	14.03	A
	ATOM	623	OE1	GLN	A	104	49.305	74.172	18.564	1.00	14.60	A
	ATOM	624	NE2	GLN	A	104	50.242	73.483	16.640	1.00	14.23	A
	ATOM	625	C	GLN	A	104	45.301	72.992	18.667	1.00	14.02	A
10	ATOM	626	O	GLN	A	104	45.552	72.849	19.863	1.00	14.69	A
	ATOM	627	N	HIS	A	105	44.067	73.152	18.202	1.00	14.24	A
	ATOM	628	CA	HIS	A	105	42.912	73.235	19.091	1.00	15.29	A
	ATOM	629	CB	HIS	A	105	41.796	74.035	18.412	1.00	18.09	A
	ATOM	630	CG	HIS	A	105	42.228	75.377	17.907	1.00	21.36	A
	ATOM	631	CD2	HIS	A	105	43.322	76.126	18.181	1.00	23.58	A
15	ATOM	632	ND1	HIS	A	105	41.481	76.105	17.005	1.00	23.59	A
	ATOM	633	CE1	HIS	A	105	42.098	77.244	16.744	1.00	24.20	A
	ATOM	634	NE2	HIS	A	105	43.217	77.281	17.445	1.00	24.69	A
	ATOM	635	C	HIS	A	105	42.330	71.905	19.552	1.00	15.14	A
20	ATOM	636	O	HIS	A	105	41.815	71.807	20.665	1.00	15.70	A
	ATOM	637	N	ASP	A	106	42.416	70.880	18.712	1.00	13.68	A
	ATOM	638	CA	ASP	A	106	41.818	69.600	19.064	1.00	13.41	A
	ATOM	639	CB	ASP	A	106	40.556	69.386	18.221	1.00	15.33	A
	ATOM	640	CG	ASP	A	106	39.513	70.461	18.449	1.00	17.76	A
	ATOM	641	OD1	ASP	A	106	38.857	70.435	19.509	1.00	18.23	A
25	ATOM	642	OD2	ASP	A	106	39.359	71.337	17.570	1.00	19.51	A
	ATOM	643	C	ASP	A	106	42.673	68.346	18.960	1.00	12.48	A
	ATOM	644	O	ASP	A	106	42.942	67.684	19.957	1.00	11.86	A
	ATOM	645	N	THR	A	107	43.095	68.025	17.745	1.00	11.48	A
30	ATOM	646	CA	THR	A	107	43.845	66.805	17.490	1.00	10.31	A
	ATOM	647	CB	THR	A	107	44.169	66.694	15.991	1.00	9.81	A
	ATOM	648	OG1	THR	A	107	42.964	66.919	15.247	1.00	9.72	A
	ATOM	649	CG2	THR	A	107	44.710	65.302	15.656	1.00	9.56	A
	ATOM	650	C	THR	A	107	45.100	66.517	18.305	1.00	10.15	A
35	ATOM	651	O	THR	A	107	45.309	65.377	18.722	1.00	9.55	A
	ATOM	652	N	LYS	A	108	45.940	67.515	18.555	1.00	10.06	A
	ATOM	653	CA	LYS	A	108	47.142	67.223	19.323	1.00	10.48	A
	ATOM	654	CB	LYS	A	108	48.109	68.416	19.322	1.00	11.26	A
	ATOM	655	CG	LYS	A	108	47.753	69.597	20.206	1.00	12.62	A
40	ATOM	656	CD	LYS	A	108	48.842	70.661	20.066	1.00	13.56	A
	ATOM	657	CE	LYS	A	108	48.632	71.837	21.000	1.00	14.90	A
	ATOM	658	NZ	LYS	A	108	49.762	72.815	20.901	1.00	16.47	A
	ATOM	659	C	LYS	A	108	46.777	66.809	20.744	1.00	10.06	A
	ATOM	660	O	LYS	A	108	47.483	66.013	21.364	1.00	10.31	A
45	ATOM	661	N	HIS	A	109	45.663	67.330	21.246	1.00	10.31	A
	ATOM	662	CA	HIS	A	109	45.210	66.985	22.590	1.00	10.51	A
	ATOM	663	CB	HIS	A	109	44.215	68.031	23.086	1.00	12.57	A
	ATOM	664	CG	HIS	A	109	44.791	69.410	23.154	1.00	14.27	A
	ATOM	665	CD2	HIS	A	109	44.510	70.530	22.448	1.00	16.35	A
50	ATOM	666	ND1	HIS	A	109	45.821	69.743	24.008	1.00	16.64	A
	ATOM	667	CE1	HIS	A	109	46.148	71.010	23.825	1.00	16.26	A
	ATOM	668	NE2	HIS	A	109	45.368	71.510	22.884	1.00	16.75	A
	ATOM	669	C	HIS	A	109	44.578	65.598	22.594	1.00	10.63	A
	ATOM	670	O	HIS	A	109	44.765	64.824	23.530	1.00	10.59	A
	ATOM	671	N	ILE	A	110	43.832	65.283	21.543	1.00	10.70	A
55	ATOM	672	CA	ILE	A	110	43.202	63.975	21.426	1.00	10.48	A

5	ATOM	673	CB	ILE	A	110	42.369	63.881	20.125	1.00	10.18	A
	ATOM	674	CG2	ILE	A	110	41.950	62.435	19.864	1.00	10.02	A
	ATOM	675	CG1	ILE	A	110	41.151	64.802	20.229	1.00	10.13	A
	ATOM	676	CD1	ILE	A	110	40.395	64.989	18.921	1.00	10.58	A
	ATOM	677	C	ILE	A	110	44.279	62.889	21.407	1.00	10.11	A
10	ATOM	678	O	ILE	A	110	44.187	61.892	22.125	1.00	9.62	A
	ATOM	679	N	LEU	A	111	45.307	63.087	20.591	1.00	10.21	A
	ATOM	680	CA	LEU	A	111	46.382	62.112	20.490	1.00	10.24	A
	ATOM	681	CB	LEU	A	111	47.233	62.400	19.245	1.00	9.69	A
	ATOM	682	CG	LEU	A	111	46.511	62.066	17.933	1.00	10.41	A
15	ATOM	683	CD1	LEU	A	111	47.335	62.524	16.739	1.00	10.20	A
	ATOM	684	CD2	LEU	A	111	46.261	60.566	17.865	1.00	11.30	A
	ATOM	685	C	LEU	A	111	47.253	62.049	21.741	1.00	10.20	A
	ATOM	686	O	LEU	A	111	47.695	60.971	22.138	1.00	10.28	A
	ATOM	687	N	SER	A	112	47.490	63.196	22.371	1.00	10.82	A
20	ATOM	688	CA	SER	A	112	48.305	63.227	23.579	1.00	12.22	A
	ATOM	689	CB	SER	A	112	48.593	64.668	23.993	1.00	13.20	A
	ATOM	690	OG	SER	A	112	49.388	64.701	25.165	1.00	16.62	A
	ATOM	691	C	SER	A	112	47.586	62.502	24.710	1.00	11.85	A
	ATOM	692	O	SER	A	112	48.193	61.735	25.464	1.00	11.71	A
25	ATOM	693	N	ASN	A	113	46.285	62.737	24.830	1.00	11.70	A
	ATOM	694	CA	ASN	A	113	45.535	62.080	25.886	1.00	12.34	A
	ATOM	695	CB	ASN	A	113	44.252	62.858	26.187	1.00	12.62	A
	ATOM	696	CG	ASN	A	113	44.546	64.218	26.802	1.00	14.17	A
	ATOM	697	OD1	ASN	A	113	45.603	64.414	27.404	1.00	16.67	A
30	ATOM	698	ND2	ASN	A	113	43.620	65.155	26.663	1.00	15.15	A
	ATOM	699	C	ASN	A	113	45.254	60.616	25.558	1.00	12.29	A
	ATOM	700	O	ASN	A	113	45.082	59.797	26.460	1.00	12.15	A
	ATOM	701	N	ALA	A	114	45.230	60.275	24.272	1.00	11.71	A
	ATOM	702	CA	ALA	A	114	45.014	58.885	23.885	1.00	11.74	A
35	ATOM	703	CB	ALA	A	114	44.847	58.773	22.373	1.00	10.96	A
	ATOM	704	C	ALA	A	114	46.240	58.097	24.332	1.00	11.77	A
	ATOM	705	O	ALA	A	114	46.129	56.983	24.846	1.00	11.90	A
	ATOM	706	N	LEU	A	115	47.415	58.688	24.139	1.00	12.06	A
	ATOM	707	CA	LEU	A	115	48.663	58.045	24.517	1.00	12.83	A
40	ATOM	708	CB	LEU	A	115	49.854	58.922	24.114	1.00	13.32	A
	ATOM	709	CG	LEU	A	115	51.247	58.411	24.497	1.00	13.43	A
	ATOM	710	CD1	LEU	A	115	51.472	57.025	23.924	1.00	13.50	A
	ATOM	711	CD2	LEU	A	115	52.301	59.368	23.984	1.00	14.02	A
	ATOM	712	C	LEU	A	115	48.696	57.788	26.019	1.00	13.61	A
45	ATOM	713	O	LEU	A	115	49.035	56.692	26.467	1.00	13.52	A
	ATOM	714	N	ARG	A	116	48.328	58.801	26.792	1.00	14.73	A
	ATOM	715	CA	ARG	A	116	48.323	58.683	28.243	1.00	16.31	A
	ATOM	716	CB	ARG	A	116	48.074	60.057	28.870	1.00	20.55	A
	ATOM	717	CG	ARG	A	116	49.189	61.051	28.594	1.00	27.46	A
50	ATOM	718	CD	ARG	A	116	48.820	62.464	29.011	1.00	32.63	A
	ATOM	719	NE	ARG	A	116	49.890	63.410	28.707	1.00	36.87	A
	ATOM	720	CZ	ARG	A	116	49.786	64.728	28.840	1.00	39.09	A
	ATOM	721	NH1	ARG	A	116	48.654	65.265	29.274	1.00	40.46	A
	ATOM	722	NH2	ARG	A	116	50.815	65.510	28.542	1.00	40.54	A
55	ATOM	723	C	ARG	A	116	47.289	57.684	28.753	1.00	15.28	A
	ATOM	724	O	ARG	A	116	47.615	56.783	29.529	1.00	14.55	A
	ATOM	725	N	HIS	A	117	46.045	57.833	28.311	1.00	14.65	A
	ATOM	726	CA	HIS	A	117	44.978	56.946	28.758	1.00	14.93	A
	ATOM	727	CB	HIS	A	117	43.626	57.505	28.326	1.00	15.81	A

5	ATOM	728	CG	HIS	A	117	43.174	58.659	29.164	1.00	18.36	A
	ATOM	729	CD2	HIS	A	117	43.285	59.995	28.977	1.00	19.28	A
	ATOM	730	ND1	HIS	A	117	42.608	58.492	30.411	1.00	18.96	A
	ATOM	731	CE1	HIS	A	117	42.394	59.677	30.957	1.00	19.96	A
	ATOM	732	NE2	HIS	A	117	42.797	60.605	30.108	1.00	19.61	A
10	ATOM	733	C	HIS	A	117	45.120	55.494	28.337	1.00	14.42	A
	ATOM	734	O	HIS	A	117	44.809	54.598	29.113	1.00	13.52	A
	ATOM	735	N	LEU	A	118	45.585	55.248	27.119	1.00	13.01	A
	ATOM	736	CA	LEU	A	118	45.769	53.876	26.669	1.00	13.05	A
	ATOM	737	CB	LEU	A	118	46.041	53.838	25.161	1.00	12.57	A
15	ATOM	738	CG	LEU	A	118	44.841	54.238	24.292	1.00	14.54	A
	ATOM	739	CD1	LEU	A	118	45.260	54.333	22.832	1.00	14.69	A
	ATOM	740	CD2	LEU	A	118	43.728	53.215	24.456	1.00	14.25	A
	ATOM	741	C	LEU	A	118	46.930	53.265	27.445	1.00	12.95	A
	ATOM	742	O	LEU	A	118	46.867	52.112	27.877	1.00	13.64	A
20	ATOM	743	N	HIS	A	119	47.988	54.044	27.639	1.00	13.37	A
	ATOM	744	CA	HIS	A	119	49.140	53.560	28.383	1.00	13.90	A
	ATOM	745	CB	HIS	A	119	50.209	54.657	28.465	1.00	15.67	A
	ATOM	746	CG	HIS	A	119	51.375	54.311	29.338	1.00	18.23	A
	ATOM	747	CD2	HIS	A	119	52.589	53.792	29.039	1.00	19.68	A
25	ATOM	748	ND1	HIS	A	119	51.363	54.493	30.705	1.00	20.08	A
	ATOM	749	CE1	HIS	A	119	52.521	54.104	31.209	1.00	20.46	A
	ATOM	750	NE2	HIS	A	119	53.283	53.673	30.219	1.00	20.35	A
	ATOM	751	C	HIS	A	119	48.716	53.131	29.788	1.00	14.72	A
	ATOM	752	O	HIS	A	119	49.100	52.061	30.255	1.00	15.00	A
30	ATOM	753	N	ASP	A	120	47.901	53.954	30.444	1.00	14.48	A
	ATOM	754	CA	ASP	A	120	47.453	53.664	31.808	1.00	14.75	A
	ATOM	755	CB	ASP	A	120	47.077	54.964	32.523	1.00	15.77	A
	ATOM	756	CG	ASP	A	120	48.267	55.877	32.737	1.00	16.92	A
	ATOM	757	OD1	ASP	A	120	49.409	55.375	32.760	1.00	19.17	A
35	ATOM	758	OD2	ASP	A	120	48.060	57.097	32.902	1.00	19.89	A
	ATOM	759	C	ASP	A	120	46.305	52.666	31.976	1.00	14.84	A
	ATOM	760	O	ASP	A	120	46.051	52.201	33.090	1.00	14.82	A
	ATOM	761	N	ASN	A	121	45.613	52.340	30.888	1.00	13.52	A
	ATOM	762	CA	ASN	A	121	44.492	51.402	30.937	1.00	13.53	A
40	ATOM	763	CB	ASN	A	121	43.171	52.152	30.762	1.00	13.80	A
	ATOM	764	CG	ASN	A	121	42.971	53.227	31.815	1.00	13.90	A
	ATOM	765	OD1	ASN	A	121	43.327	54.394	31.615	1.00	15.49	A
	ATOM	766	ND2	ASN	A	121	42.416	52.833	32.957	1.00	13.19	A
	ATOM	767	C	ASN	A	121	44.673	50.374	29.827	1.00	14.09	A
45	ATOM	768	O	ASN	A	121	44.160	50.534	28.721	1.00	13.05	A
	ATOM	769	N	PRO	A	122	45.406	49.290	30.121	1.00	14.55	A
	ATOM	770	CD	PRO	A	122	45.858	48.944	31.481	1.00	15.39	A
	ATOM	771	CA	PRO	A	122	45.704	48.200	29.187	1.00	14.85	A
	ATOM	772	CB	PRO	A	122	46.410	47.169	30.072	1.00	15.58	A
50	ATOM	773	CG	PRO	A	122	45.853	47.446	31.436	1.00	17.22	A
	ATOM	774	C	PRO	A	122	44.565	47.592	28.371	1.00	15.15	A
	ATOM	775	O	PRO	A	122	44.795	47.126	27.254	1.00	15.89	A
	ATOM	776	N	GLU	A	123	43.348	47.588	28.908	1.00	15.16	A
	ATOM	777	CA	GLU	A	123	42.218	47.015	28.179	1.00	15.87	A
55	ATOM	778	CB	GLU	A	123	41.214	46.386	29.150	1.00	18.34	A
	ATOM	779	CG	GLU	A	123	41.622	45.016	29.679	1.00	23.44	A
	ATOM	780	CD	GLU	A	123	42.880	45.055	30.520	1.00	26.21	A
	ATOM	781	OE1	GLU	A	123	42.873	45.729	31.571	1.00	28.94	A
	ATOM	782	OE2	GLU	A	123	43.877	44.409	30.131	1.00	29.25	A

5	ATOM	783	C	GLU	A	123	41.490	48.004	27.269	1.00	14.24	A
	ATOM	784	O	GLU	A	123	40.654	47.603	26.460	1.00	14.23	A
	ATOM	785	N	MSE	A	124	41.798	49.290	27.401	1.00	12.95	A
	ATOM	786	CA	MSE	A	124	41.158	50.303	26.566	1.00	12.17	A
	ATOM	787	CB	MSE	A	124	41.390	51.699	27.153	1.00	13.28	A
10	ATOM	788	CG	MSE	A	124	40.655	52.810	26.411	1.00	14.49	A
	ATOM	789	SE	MSE	A	124	38.739	52.530	26.354	1.00	19.78	A
	ATOM	790	CE	MSE	A	124	38.233	54.129	25.400	1.00	15.56	A
	ATOM	791	C	MSE	A	124	41.740	50.220	25.155	1.00	12.04	A
	ATOM	792	O	MSE	A	124	42.918	49.903	24.983	1.00	11.44	A
15	ATOM	793	N	LYS	A	125	40.904	50.504	24.157	1.00	10.65	A
	ATOM	794	CA	LYS	A	125	41.310	50.451	22.751	1.00	11.22	A
	ATOM	795	CB	LYS	A	125	40.634	49.267	22.056	1.00	12.76	A
	ATOM	796	CG	LYS	A	125	40.903	47.921	22.714	1.00	15.07	A
	ATOM	797	CD	LYS	A	125	42.347	47.489	22.541	1.00	17.58	A
20	ATOM	798	CE	LYS	A	125	42.641	46.222	23.336	1.00	19.16	A
	ATOM	799	NZ	LYS	A	125	41.712	45.118	22.986	1.00	20.18	A
	ATOM	800	C	LYS	A	125	40.933	51.742	22.029	1.00	11.10	A
	ATOM	801	O	LYS	A	125	40.101	52.512	22.513	1.00	10.44	A
	ATOM	802	N	PHE	A	126	41.527	51.963	20.858	1.00	9.90	A
25	ATOM	803	CA	PHE	A	126	41.268	53.180	20.091	1.00	9.14	A
	ATOM	804	CB	PHE	A	126	42.037	54.340	20.751	1.00	9.51	A
	ATOM	805	CG	PHE	A	126	41.681	55.714	20.236	1.00	8.79	A
	ATOM	806	CD1	PHE	A	126	40.364	56.163	20.235	1.00	9.46	A
	ATOM	807	CD2	PHE	A	126	42.689	56.594	19.837	1.00	9.29	A
30	ATOM	808	CE1	PHE	A	126	40.053	57.473	19.852	1.00	9.45	A
	ATOM	809	CE2	PHE	A	126	42.392	57.901	19.452	1.00	9.40	A
	ATOM	810	CZ	PHE	A	126	41.069	58.343	19.461	1.00	8.66	A
	ATOM	811	C	PHE	A	126	41.759	52.968	18.657	1.00	9.49	A
	ATOM	812	O	PHE	A	126	42.823	52.385	18.448	1.00	9.51	A
35	ATOM	813	N	ILE	A	127	40.982	53.413	17.673	1.00	8.68	A
	ATOM	814	CA	ILE	A	127	41.420	53.291	16.282	1.00	8.06	A
	ATOM	815	CB	ILE	A	127	40.391	52.546	15.381	1.00	8.73	A
	ATOM	816	CG2	ILE	A	127	40.280	51.089	15.821	1.00	9.17	A
	ATOM	817	CG1	ILE	A	127	39.027	53.238	15.415	1.00	8.60	A
40	ATOM	818	CD1	ILE	A	127	38.045	52.674	14.387	1.00	9.58	A
	ATOM	819	C	ILE	A	127	41.690	54.679	15.706	1.00	8.78	A
	ATOM	820	O	ILE	A	127	41.069	55.664	16.120	1.00	8.81	A
	ATOM	821	N	TRP	A	128	42.631	54.757	14.770	1.00	8.59	A
	ATOM	822	CA	TRP	A	128	42.997	56.029	14.156	1.00	8.27	A
45	ATOM	823	CB	TRP	A	128	44.323	56.530	14.724	1.00	8.26	A
	ATOM	824	CG	TRP	A	128	44.564	57.952	14.381	1.00	8.27	A
	ATOM	825	CD2	TRP	A	128	44.001	59.084	15.044	1.00	8.03	A
	ATOM	826	CE2	TRP	A	128	44.411	60.233	14.332	1.00	8.27	A
	ATOM	827	CE3	TRP	A	128	43.181	59.241	16.172	1.00	8.19	A
50	ATOM	828	CD1	TRP	A	128	45.282	58.440	13.324	1.00	8.35	A
	ATOM	829	NE1	TRP	A	128	45.192	59.812	13.287	1.00	8.32	A
	ATOM	830	CZ2	TRP	A	128	44.031	61.525	14.711	1.00	9.09	A
	ATOM	831	CZ3	TRP	A	128	42.802	60.525	16.549	1.00	8.49	A
	ATOM	832	CH2	TRP	A	128	43.229	61.651	15.817	1.00	9.77	A
55	ATOM	833	C	TRP	A	128	43.115	55.889	12.644	1.00	8.27	A
	ATOM	834	O	TRP	A	128	43.754	54.958	12.153	1.00	8.12	A
	ATOM	835	N	ALA	A	129	42.534	56.839	11.912	1.00	8.70	A
	ATOM	836	CA	ALA	A	129	42.549	56.784	10.449	1.00	9.71	A
	ATOM	837	CB	ALA	A	129	41.125	56.886	9.932	1.00	10.43	A

5	ATOM	838	C	ALA	A	129	43.414	57.791	9.694	1.00	10.28	A
	ATOM	839	O	ALA	A	129	44.088	57.422	8.734	1.00	11.35	A
	ATOM	840	N	GLU	A	130	43.387	59.054	10.114	1.00	10.58	A
	ATOM	841	CA	GLU	A	130	44.116	60.124	9.426	1.00	10.04	A
	ATOM	842	CB	GLU	A	130	43.411	61.461	9.678	1.00	11.26	A
10	ATOM	843	CG	GLU	A	130	41.913	61.457	9.368	1.00	11.65	A
	ATOM	844	CD	GLU	A	130	41.064	60.935	10.515	1.00	13.66	A
	ATOM	845	OE1	GLU	A	130	41.629	60.582	11.573	1.00	14.42	A
	ATOM	846	OE2	GLU	A	130	39.823	60.885	10.361	1.00	15.28	A
	ATOM	847	C	GLU	A	130	45.596	60.259	9.770	1.00	10.03	A
15	ATOM	848	O	GLU	A	130	45.962	60.900	10.755	1.00	9.29	A
	ATOM	849	N	ILE	A	131	46.454	59.692	8.927	1.00	9.13	A
	ATOM	850	CA	ILE	A	131	47.890	59.737	9.176	1.00	9.11	A
	ATOM	851	CB	ILE	A	131	48.618	58.700	8.292	1.00	9.01	A
	ATOM	852	CG2	ILE	A	131	50.109	58.686	8.606	1.00	9.14	A
20	ATOM	853	CG1	ILE	A	131	48.019	57.311	8.555	1.00	8.24	A
	ATOM	854	CD1	ILE	A	131	47.979	56.917	10.038	1.00	9.81	A
	ATOM	855	C	ILE	A	131	48.518	61.127	9.030	1.00	9.70	A
	ATOM	856	O	ILE	A	131	49.559	61.401	9.632	1.00	9.54	A
	ATOM	857	N	SER	A	132	47.900	62.012	8.251	1.00	7.89	A
25	ATOM	858	CA	SER	A	132	48.432	63.369	8.125	1.00	8.13	A
	ATOM	859	CB	SER	A	132	47.508	64.231	7.254	1.00	8.35	A
	ATOM	860	OG	SER	A	132	46.173	64.210	7.732	1.00	9.16	A
	ATOM	861	C	SER	A	132	48.546	63.970	9.532	1.00	8.70	A
	ATOM	862	O	SER	A	132	49.561	64.576	9.878	1.00	8.62	A
30	ATOM	863	N	TYR	A	133	47.507	63.785	10.342	1.00	8.09	A
	ATOM	864	CA	TYR	A	133	47.495	64.289	11.715	1.00	8.79	A
	ATOM	865	CB	TYR	A	133	46.093	64.185	12.317	1.00	8.24	A
	ATOM	866	CG	TYR	A	133	45.175	65.342	12.002	1.00	7.35	A
	ATOM	867	CD1	TYR	A	133	43.908	65.117	11.476	1.00	8.15	A
35	ATOM	868	CE1	TYR	A	133	43.035	66.165	11.223	1.00	9.16	A
	ATOM	869	CD2	TYR	A	133	45.556	66.659	12.271	1.00	8.71	A
	ATOM	870	CE2	TYR	A	133	44.688	67.722	12.020	1.00	9.71	A
	ATOM	871	CZ	TYR	A	133	43.430	67.466	11.497	1.00	9.62	A
	ATOM	872	OH	TYR	A	133	42.562	68.503	11.238	1.00	10.12	A
40	ATOM	873	C	TYR	A	133	48.449	63.512	12.616	1.00	9.14	A
	ATOM	874	O	TYR	A	133	49.164	64.103	13.430	1.00	9.28	A
	ATOM	875	N	PHE	A	134	48.452	62.189	12.485	1.00	8.42	A
	ATOM	876	CA	PHE	A	134	49.312	61.379	13.335	1.00	9.57	A
	ATOM	877	CB	PHE	A	134	49.070	59.889	13.112	1.00	8.94	A
45	ATOM	878	CG	PHE	A	134	49.609	59.032	14.222	1.00	9.95	A
	ATOM	879	CD1	PHE	A	134	48.867	58.831	15.384	1.00	9.54	A
	ATOM	880	CD2	PHE	A	134	50.885	58.487	14.139	1.00	10.64	A
	ATOM	881	CE1	PHE	A	134	49.393	58.101	16.448	1.00	10.14	A
	ATOM	882	CE2	PHE	A	134	51.420	57.756	15.198	1.00	10.36	A
50	ATOM	883	CZ	PHE	A	134	50.672	57.565	16.354	1.00	9.82	A
	ATOM	884	C	PHE	A	134	50.786	61.689	13.115	1.00	10.39	A
	ATOM	885	O	PHE	A	134	51.559	61.757	14.070	1.00	10.24	A
	ATOM	886	N	ALA	A	135	51.177	61.876	11.859	1.00	10.93	A
	ATOM	887	CA	ALA	A	135	52.567	62.186	11.551	1.00	11.81	A
55	ATOM	888	CB	ALA	A	135	52.786	62.166	10.042	1.00	11.65	A
	ATOM	889	C	ALA	A	135	52.921	63.560	12.129	1.00	12.73	A
	ATOM	890	O	ALA	A	135	54.002	63.745	12.689	1.00	14.32	A
	ATOM	891	N	ARG	A	136	52.006	64.514	11.991	1.00	12.97	A
	ATOM	892	CA	ARG	A	136	52.213	65.868	12.510	1.00	13.88	A

5	ATOM	893	CB	ARG	A	136	50.980	66.735	12.225	1.00	14.42	A
	ATOM	894	CG	ARG	A	136	50.999	68.119	12.879	1.00	15.79	A
	ATOM	895	CD	ARG	A	136	51.752	69.145	12.040	1.00	17.40	A
	ATOM	896	NE	ARG	A	136	51.754	70.460	12.680	1.00	17.54	A
	ATOM	897	CZ	ARG	A	136	52.462	70.754	13.765	1.00	17.89	A
	ATOM	898	NH1	ARG	A	136	53.230	69.829	14.325	1.00	18.15	A
	ATOM	899	NH2	ARG	A	136	52.387	71.966	14.300	1.00	16.63	A
	ATOM	900	C	ARG	A	136	52.459	65.813	14.018	1.00	14.79	A
10	ATOM	901	O	ARG	A	136	53.299	66.539	14.552	1.00	16.05	A
	ATOM	902	N	PHE	A	137	51.720	64.939	14.692	1.00	13.05	A
	ATOM	903	CA	PHE	A	137	51.823	64.766	16.136	1.00	13.29	A
	ATOM	904	CB	PHE	A	137	50.607	63.989	16.639	1.00	13.13	A
15	ATOM	905	CG	PHE	A	137	50.611	63.746	18.116	1.00	13.98	A
	ATOM	906	CD1	PHE	A	137	50.372	64.791	19.000	1.00	13.65	A
	ATOM	907	CD2	PHE	A	137	50.864	62.478	18.624	1.00	14.23	A
	ATOM	908	CE1	PHE	A	137	50.381	64.582	20.372	1.00	14.75	A
	ATOM	909	CE2	PHE	A	137	50.876	62.256	20.005	1.00	15.02	A
	ATOM	910	CZ	PHE	A	137	50.633	63.314	20.875	1.00	13.04	A
20	ATOM	911	C	PHE	A	137	53.089	64.027	16.557	1.00	13.44	A
	ATOM	912	O	PHE	A	137	53.866	64.509	17.387	1.00	14.03	A
	ATOM	913	N	TYR	A	138	53.287	62.851	15.974	1.00	13.77	A
	ATOM	914	CA	TYR	A	138	54.427	62.001	16.291	1.00	14.96	A
	ATOM	915	CB	TYR	A	138	54.433	60.778	15.375	1.00	14.56	A
25	ATOM	916	CG	TYR	A	138	55.421	59.715	15.795	1.00	14.71	A
	ATOM	917	CD1	TYR	A	138	55.125	58.837	16.836	1.00	14.96	A
	ATOM	918	CE1	TYR	A	138	56.030	57.855	17.230	1.00	15.31	A
	ATOM	919	CD2	TYR	A	138	56.653	59.589	15.156	1.00	15.19	A
30	ATOM	920	CE2	TYR	A	138	57.567	58.608	15.544	1.00	15.16	A
	ATOM	921	CZ	TYR	A	138	57.247	57.746	16.579	1.00	15.51	A
	ATOM	922	OH	TYR	A	138	58.138	56.769	16.958	1.00	17.55	A
	ATOM	923	C	TYR	A	138	55.783	62.691	16.198	1.00	16.54	A
	ATOM	924	O	TYR	A	138	56.625	62.536	17.084	1.00	16.24	A
35	ATOM	925	N	HIS	A	139	56.001	63.445	15.128	1.00	17.34	A
	ATOM	926	CA	HIS	A	139	57.277	64.124	14.948	1.00	19.15	A
	ATOM	927	CB	HIS	A	139	57.381	64.678	13.525	1.00	19.96	A
	ATOM	928	CG	HIS	A	139	57.571	63.618	12.483	1.00	21.16	A
	ATOM	929	CD2	HIS	A	139	56.802	63.252	11.429	1.00	21.41	A
40	ATOM	930	ND1	HIS	A	139	58.666	62.780	12.467	1.00	21.98	A
	ATOM	931	CE1	HIS	A	139	58.564	61.945	11.448	1.00	22.61	A
	ATOM	932	NE2	HIS	A	139	57.443	62.210	10.802	1.00	21.85	A
	ATOM	933	C	HIS	A	139	57.546	65.221	15.975	1.00	19.75	A
	ATOM	934	O	HIS	A	139	58.683	65.660	16.133	1.00	20.84	A
45	ATOM	935	N	ASP	A	140	56.505	65.660	16.675	1.00	18.81	A
	ATOM	936	CA	ASP	A	140	56.658	66.692	17.697	1.00	18.99	A
	ATOM	937	CB	ASP	A	140	55.438	67.614	17.705	1.00	20.32	A
	ATOM	938	CG	ASP	A	140	55.559	68.742	16.702	1.00	21.99	A
	ATOM	939	OD1	ASP	A	140	56.308	68.579	15.717	1.00	23.53	A
50	ATOM	940	OD2	ASP	A	140	54.901	69.786	16.894	1.00	22.73	A
	ATOM	941	C	ASP	A	140	56.855	66.078	19.080	1.00	18.52	A
	ATOM	942	O	ASP	A	140	57.154	66.781	20.048	1.00	18.42	A
	ATOM	943	N	LEU	A	141	56.692	64.762	19.166	1.00	18.16	A
	ATOM	944	CA	LEU	A	141	56.851	64.043	20.426	1.00	18.15	A
55	ATOM	945	CB	LEU	A	141	56.171	62.674	20.355	1.00	17.96	A
	ATOM	946	CG	LEU	A	141	54.651	62.547	20.381	1.00	17.86	A
	ATOM	947	CD1	LEU	A	141	54.285	61.069	20.292	1.00	17.13	A

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5	ATOM	948	CD2	LEU	A	141	54.097	63.154	21.662	1.00	17.42	A
	ATOM	949	C	LEU	A	141	58.306	63.816	20.805	1.00	19.03	A
	ATOM	950	O	LEU	A	141	59.168	63.651	19.943	1.00	18.72	A
	ATOM	951	N	GLY	A	142	58.569	63.802	22.108	1.00	20.19	A
	ATOM	952	CA	GLY	A	142	59.913	63.545	22.585	1.00	21.21	A
	ATOM	953	C	GLY	A	142	60.161	62.057	22.424	1.00	22.12	A
	ATOM	954	O	GLY	A	142	59.209	61.283	22.295	1.00	21.38	A
	ATOM	955	N	GLU	A	143	61.425	61.646	22.437	1.00	23.15	A
10	ATOM	956	CA	GLU	A	143	61.772	60.239	22.267	1.00	24.67	A
	ATOM	957	CB	GLU	A	143	63.287	60.052	22.381	1.00	27.38	A
	ATOM	958	CG	GLU	A	143	63.763	58.660	21.997	1.00	30.77	A
	ATOM	959	CD	GLU	A	143	63.303	58.253	20.609	1.00	32.52	A
	ATOM	960	OE1	GLU	A	143	63.586	58.993	19.643	1.00	33.98	A
15	ATOM	961	OE2	GLU	A	143	62.656	57.192	20.484	1.00	33.85	A
	ATOM	962	C	GLU	A	143	61.066	59.311	23.252	1.00	24.07	A
	ATOM	963	O	GLU	A	143	60.625	58.225	22.880	1.00	23.09	A
	ATOM	964	N	ASN	A	144	60.958	59.736	24.506	1.00	23.61	A
	ATOM	965	CA	ASN	A	144	60.302	58.924	25.525	1.00	23.85	A
20	ATOM	966	CB	ASN	A	144	60.329	59.652	26.874	1.00	25.76	A
	ATOM	967	CG	ASN	A	144	59.589	58.897	27.967	1.00	27.79	A
	ATOM	968	OD1	ASN	A	144	58.360	58.797	27.949	1.00	28.98	A
	ATOM	969	ND2	ASN	A	144	60.338	58.359	28.923	1.00	28.61	A
	ATOM	970	C	ASN	A	144	58.864	58.610	25.124	1.00	22.68	A
25	ATOM	971	O	ASN	A	144	58.425	57.462	25.202	1.00	22.15	A
	ATOM	972	N	LYS	A	145	58.139	59.634	24.682	1.00	21.73	A
	ATOM	973	CA	LYS	A	145	56.749	59.470	24.270	1.00	20.84	A
	ATOM	974	CB	LYS	A	145	56.073	60.837	24.132	1.00	22.57	A
	ATOM	975	CG	LYS	A	145	55.854	61.561	25.455	1.00	24.93	A
30	ATOM	976	CD	LYS	A	145	54.914	60.778	26.361	1.00	27.02	A
	ATOM	977	CE	LYS	A	145	54.640	61.523	27.661	1.00	28.49	A
	ATOM	978	NZ	LYS	A	145	55.882	61.756	28.449	1.00	29.61	A
	ATOM	979	C	LYS	A	145	56.617	58.689	22.965	1.00	19.52	A
	ATOM	980	O	LYS	A	145	55.654	57.940	22.784	1.00	18.64	A
35	ATOM	981	N	LYS	A	146	57.571	58.866	22.054	1.00	18.73	A
	ATOM	982	CA	LYS	A	146	57.535	58.137	20.788	1.00	17.79	A
	ATOM	983	CB	LYS	A	146	58.730	58.502	19.898	1.00	17.55	A
	ATOM	984	CG	LYS	A	146	58.589	59.813	19.139	1.00	17.75	A
	ATOM	985	CD	LYS	A	146	59.758	60.012	18.181	1.00	18.32	A
40	ATOM	986	CE	LYS	A	146	59.592	61.275	17.344	1.00	18.96	A
	ATOM	987	NZ	LYS	A	146	60.778	61.526	16.481	1.00	22.20	A
	ATOM	988	C	LYS	A	146	57.576	56.647	21.097	1.00	17.36	A
	ATOM	989	O	LYS	A	146	56.859	55.856	20.487	1.00	16.67	A
	ATOM	990	N	LEU	A	147	58.419	56.273	22.055	1.00	17.41	A
45	ATOM	991	CA	LEU	A	147	58.557	54.880	22.461	1.00	17.08	A
	ATOM	992	CB	LEU	A	147	59.735	54.727	23.429	1.00	18.23	A
	ATOM	993	CG	LEU	A	147	61.111	54.969	22.802	1.00	19.30	A
	ATOM	994	CD1	LEU	A	147	62.186	54.935	23.876	1.00	19.92	A
	ATOM	995	CD2	LEU	A	147	61.380	53.909	21.741	1.00	20.31	A
50	ATOM	996	C	LEU	A	147	57.273	54.362	23.103	1.00	16.49	A
	ATOM	997	O	LEU	A	147	56.855	53.235	22.841	1.00	15.40	A
	ATOM	998	N	GLN	A	148	56.645	55.179	23.944	1.00	16.51	A
	ATOM	999	CA	GLN	A	148	55.395	54.769	24.572	1.00	16.83	A
	ATOM	1000	CB	GLN	A	148	54.917	55.815	25.581	1.00	18.73	A
55	ATOM	1001	CG	GLN	A	148	55.746	55.891	26.849	1.00	21.13	A
	ATOM	1002	CD	GLN	A	148	55.121	56.796	27.894	1.00	23.21	A

5	ATOM	1003	OE1	GLN	A	148	55.652	56.951	28.996	1.00	25.13	A
	ATOM	1004	NE2	GLN	A	148	53.986	57.397	27.556	1.00	24.08	A
	ATOM	1005	C	GLN	A	148	54.333	54.585	23.491	1.00	16.17	A
	ATOM	1006	O	GLN	A	148	53.519	53.666	23.556	1.00	16.06	A
	ATOM	1007	N	MSE	A	149	54.350	55.462	22.493	1.00	15.44	A
10	ATOM	1008	CA	MSE	A	149	53.380	55.375	21.409	1.00	15.77	A
	ATOM	1009	CB	MSE	A	149	53.494	56.595	20.492	1.00	17.35	A
	ATOM	1010	CG	MSE	A	149	52.475	56.619	19.359	1.00	19.00	A
	ATOM	1011	SE	MSE	A	149	50.649	56.669	19.994	1.00	24.67	A
	ATOM	1012	CE	MSE	A	149	50.424	58.578	20.144	1.00	23.17	A
15	ATOM	1013	C	MSE	A	149	53.589	54.099	20.601	1.00	15.13	A
	ATOM	1014	O	MSE	A	149	52.633	53.397	20.281	1.00	13.65	A
	ATOM	1015	N	LYS	A	150	54.840	53.796	20.270	1.00	15.43	A
	ATOM	1016	CA	LYS	A	150	55.128	52.594	19.498	1.00	15.61	A
	ATOM	1017	CB	LYS	A	150	56.620	52.516	19.155	1.00	16.35	A
20	ATOM	1018	CG	LYS	A	150	57.081	53.610	18.200	1.00	19.37	A
	ATOM	1019	CD	LYS	A	150	58.582	53.563	17.941	1.00	22.38	A
	ATOM	1020	CE	LYS	A	150	58.987	52.322	17.169	1.00	24.63	A
	ATOM	1021	NZ	LYS	A	150	60.441	52.335	16.840	1.00	26.82	A
	ATOM	1022	C	LYS	A	150	54.702	51.349	20.266	1.00	14.98	A
25	ATOM	1023	O	LYS	A	150	54.265	50.365	19.672	1.00	15.43	A
	ATOM	1024	N	SER	A	151	54.806	51.400	21.591	1.00	15.45	A
	ATOM	1025	CA	SER	A	151	54.438	50.257	22.415	1.00	15.79	A
	ATOM	1026	CB	SER	A	151	54.936	50.450	23.851	1.00	17.27	A
	ATOM	1027	OG	SER	A	151	54.181	51.437	24.526	1.00	21.28	A
30	ATOM	1028	C	SER	A	151	52.936	49.975	22.422	1.00	15.04	A
	ATOM	1029	O	SER	A	151	52.530	48.818	22.315	1.00	15.10	A
	ATOM	1030	N	ILE	A	152	52.105	51.010	22.545	1.00	14.25	A
	ATOM	1031	CA	ILE	A	152	50.666	50.771	22.554	1.00	13.46	A
	ATOM	1032	CB	ILE	A	152	49.857	51.979	23.115	1.00	14.01	A
35	ATOM	1033	CG2	ILE	A	152	50.228	52.203	24.577	1.00	14.32	A
	ATOM	1034	CG1	ILE	A	152	50.103	53.243	22.295	1.00	13.78	A
	ATOM	1035	CD1	ILE	A	152	49.179	54.395	22.676	1.00	13.84	A
	ATOM	1036	C	ILE	A	152	50.149	50.383	21.172	1.00	13.41	A
	ATOM	1037	O	ILE	A	152	49.048	49.856	21.044	1.00	13.62	A
40	ATOM	1038	N	VAL	A	153	50.942	50.642	20.136	1.00	12.90	A
	ATOM	1039	CA	VAL	A	153	50.548	50.253	18.786	1.00	13.40	A
	ATOM	1040	CB	VAL	A	153	51.242	51.122	17.709	1.00	13.08	A
	ATOM	1041	CG1	VAL	A	153	51.050	50.501	16.322	1.00	13.04	A
	ATOM	1042	CG2	VAL	A	153	50.665	52.530	17.737	1.00	13.27	A
45	ATOM	1043	C	VAL	A	153	50.965	48.798	18.610	1.00	14.30	A
	ATOM	1044	O	VAL	A	153	50.195	47.970	18.121	1.00	14.16	A
	ATOM	1045	N	LYS	A	154	52.182	48.487	19.038	1.00	14.99	A
	ATOM	1046	CA	LYS	A	154	52.696	47.130	18.926	1.00	16.69	A
	ATOM	1047	CB	LYS	A	154	54.157	47.079	19.383	1.00	17.97	A
50	ATOM	1048	CG	LYS	A	154	54.867	45.775	19.034	1.00	21.07	A
	ATOM	1049	CD	LYS	A	154	56.327	45.789	19.466	1.00	23.29	A
	ATOM	1050	CE	LYS	A	154	56.476	45.645	20.976	1.00	25.47	A
	ATOM	1051	NZ	LYS	A	154	55.866	46.770	21.737	1.00	26.91	A
	ATOM	1052	C	LYS	A	154	51.859	46.146	19.745	1.00	16.92	A
55	ATOM	1053	O	LYS	A	154	51.667	45.003	19.328	1.00	17.42	A
	ATOM	1054	N	ASN	A	155	51.351	46.587	20.895	1.00	16.90	A
	ATOM	1055	CA	ASN	A	155	50.546	45.712	21.752	1.00	17.32	A
	ATOM	1056	CB	ASN	A	155	50.651	46.135	23.226	1.00	19.11	A
	ATOM	1057	CG	ASN	A	155	49.813	47.363	23.557	1.00	20.16	A

5	ATOM	1058	OD1	ASN	A	155	49.021	47.831	22.743	1.00	21.67	A
	ATOM	1059	ND2	ASN	A	155	49.980	47.883	24.772	1.00	20.93	A
	ATOM	1060	C	ASN	A	155	49.076	45.635	21.341	1.00	17.02	A
	ATOM	1061	O	ASN	A	155	48.293	44.909	21.949	1.00	18.03	A
	ATOM	1062	N	GLY	A	156	48.700	46.404	20.324	1.00	15.86	A
10	ATOM	1063	CA	GLY	A	156	47.332	46.359	19.837	1.00	15.20	A
	ATOM	1064	C	GLY	A	156	46.276	47.254	20.463	1.00	14.17	A
	ATOM	1065	O	GLY	A	156	45.097	47.107	20.146	1.00	15.09	A
	ATOM	1066	N	GLN	A	157	46.663	48.172	21.344	1.00	12.63	A
	ATOM	1067	CA	GLN	A	157	45.672	49.058	21.953	1.00	11.77	A
15	ATOM	1068	CB	GLN	A	157	46.214	49.694	23.225	1.00	11.96	A
	ATOM	1069	CG	GLN	A	157	46.326	48.750	24.399	1.00	12.30	A
	ATOM	1070	CD	GLN	A	157	46.581	49.503	25.680	1.00	11.07	A
	ATOM	1071	OE1	GLN	A	157	45.677	50.125	26.244	1.00	14.09	A
	ATOM	1072	NE2	GLN	A	157	47.823	49.477	26.136	1.00	11.57	A
20	ATOM	1073	C	GLN	A	157	45.255	50.160	20.985	1.00	10.91	A
	ATOM	1074	O	GLN	A	157	44.077	50.484	20.880	1.00	10.65	A
	ATOM	1075	N	LEU	A	158	46.238	50.747	20.308	1.00	11.05	A
	ATOM	1076	CA	LEU	A	158	45.987	51.788	19.320	1.00	10.93	A
	ATOM	1077	CB	LEU	A	158	46.989	52.935	19.479	1.00	12.25	A
25	ATOM	1078	CG	LEU	A	158	46.895	54.117	18.507	1.00	14.64	A
	ATOM	1079	CD1	LEU	A	158	47.377	53.725	17.123	1.00	17.13	A
	ATOM	1080	CD2	LEU	A	158	45.471	54.612	18.461	1.00	15.49	A
	ATOM	1081	C	LEU	A	158	46.177	51.111	17.971	1.00	11.18	A
	ATOM	1082	O	LEU	A	158	47.258	50.600	17.671	1.00	11.17	A
30	ATOM	1083	N	GLU	A	159	45.126	51.102	17.161	1.00	9.90	A
	ATOM	1084	CA	GLU	A	159	45.201	50.456	15.861	1.00	9.47	A
	ATOM	1085	CB	GLU	A	159	44.247	49.263	15.829	1.00	10.02	A
	ATOM	1086	CG	GLU	A	159	44.206	48.531	14.506	1.00	10.65	A
	ATOM	1087	CD	GLU	A	159	43.223	47.383	14.527	1.00	12.18	A
35	ATOM	1088	OE1	GLU	A	159	43.502	46.369	15.209	1.00	11.96	A
	ATOM	1089	OE2	GLU	A	159	42.168	47.502	13.873	1.00	11.42	A
	ATOM	1090	C	GLU	A	159	44.864	51.409	14.732	1.00	8.85	A
	ATOM	1091	O	GLU	A	159	43.871	52.133	14.786	1.00	9.51	A
	ATOM	1092	N	PHE	A	160	45.707	51.409	13.709	1.00	8.61	A
40	ATOM	1093	CA	PHE	A	160	45.475	52.259	12.557	1.00	8.11	A
	ATOM	1094	CB	PHE	A	160	46.802	52.613	11.881	1.00	8.37	A
	ATOM	1095	CG	PHE	A	160	47.698	53.447	12.743	1.00	8.91	A
	ATOM	1096	CD1	PHE	A	160	48.761	52.872	13.437	1.00	9.51	A
	ATOM	1097	CD2	PHE	A	160	47.444	54.801	12.906	1.00	9.15	A
45	ATOM	1098	CE1	PHE	A	160	49.555	53.643	14.284	1.00	9.60	A
	ATOM	1099	CE2	PHE	A	160	48.233	55.581	13.754	1.00	9.20	A
	ATOM	1100	CZ	PHE	A	160	49.288	54.997	14.442	1.00	10.42	A
	ATOM	1101	C	PHE	A	160	44.553	51.558	11.576	1.00	8.64	A
	ATOM	1102	O	PHE	A	160	44.726	50.374	11.270	1.00	8.99	A
50	ATOM	1103	N	VAL	A	161	43.551	52.293	11.111	1.00	8.21	A
	ATOM	1104	CA	VAL	A	161	42.603	51.767	10.147	1.00	8.58	A
	ATOM	1105	CB	VAL	A	161	41.147	51.874	10.679	1.00	7.15	A
	ATOM	1106	CG1	VAL	A	161	40.961	50.891	11.846	1.00	8.25	A
	ATOM	1107	CG2	VAL	A	161	40.848	53.290	11.153	1.00	8.29	A
55	ATOM	1108	C	VAL	A	161	42.815	52.542	8.847	1.00	8.27	A
	ATOM	1109	O	VAL	A	161	42.899	53.774	8.848	1.00	8.98	A
	ATOM	1110	N	THR	A	162	42.926	51.788	7.755	1.00	8.30	A
	ATOM	1111	CA	THR	A	162	43.203	52.294	6.403	1.00	8.76	A
	ATOM	1112	CB	THR	A	162	42.296	53.473	5.984	1.00	8.95	A

	ATOM	1113	OG1	THR	A	162	40.920	53.089	6.084	1.00	10.09	A
	ATOM	1114	CG2	THR	A	162	42.580	53.855	4.532	1.00	10.53	A
	ATOM	1115	C	THR	A	162	44.656	52.759	6.347	1.00	8.36	A
5	ATOM	1116	O	THR	A	162	45.478	52.184	5.633	1.00	8.75	A
	ATOM	1117	N	GLY	A	163	44.972	53.800	7.107	1.00	8.59	A
	ATOM	1118	CA	GLY	A	163	46.338	54.286	7.133	1.00	8.14	A
	ATOM	1119	C	GLY	A	163	46.702	55.259	6.032	1.00	7.44	A
	ATOM	1120	O	GLY	A	163	47.880	55.450	5.747	1.00	8.02	A
10	ATOM	1121	N	GLY	A	164	45.699	55.864	5.405	1.00	6.59	A
	ATOM	1122	CA	GLY	A	164	45.975	56.836	4.364	1.00	7.84	A
	ATOM	1123	C	GLY	A	164	46.278	58.189	4.979	1.00	7.81	A
	ATOM	1124	O	GLY	A	164	46.015	58.419	6.160	1.00	7.64	A
	ATOM	1125	N	TRP	A	165	46.845	59.092	4.188	1.00	6.53	A
15	ATOM	1126	CA	TRP	A	165	47.159	60.428	4.678	1.00	6.64	A
	ATOM	1127	CB	TRP	A	165	47.767	61.255	3.545	1.00	6.57	A
	ATOM	1128	CG	TRP	A	165	48.563	62.437	4.001	1.00	7.87	A
	ATOM	1129	CD2	TRP	A	165	49.760	62.414	4.791	1.00	9.42	A
	ATOM	1130	CE2	TRP	A	165	50.184	63.753	4.945	1.00	9.13	A
20	ATOM	1131	CE3	TRP	A	165	50.517	61.392	5.383	1.00	9.09	A
	ATOM	1132	CD1	TRP	A	165	48.316	63.748	3.717	1.00	9.06	A
	ATOM	1133	NE1	TRP	A	165	49.286	64.546	4.281	1.00	9.55	A
	ATOM	1134	CZ2	TRP	A	165	51.334	64.100	5.670	1.00	10.93	A
	ATOM	1135	CZ3	TRP	A	165	51.662	61.738	6.103	1.00	11.93	A
25	ATOM	1136	CH2	TRP	A	165	52.056	63.080	6.238	1.00	11.13	A
	ATOM	1137	C	TRP	A	165	45.854	61.061	5.163	1.00	5.76	A
	ATOM	1138	O	TRP	A	165	45.838	61.822	6.138	1.00	6.45	A
	ATOM	1139	N	VAL	A	166	44.766	60.720	4.477	1.00	5.84	A
	ATOM	1140	CA	VAL	A	166	43.430	61.215	4.800	1.00	6.47	A
30	ATOM	1141	CB	VAL	A	166	43.033	62.406	3.882	1.00	6.49	A
	ATOM	1142	CG1	VAL	A	166	44.041	63.541	4.018	1.00	7.93	A
	ATOM	1143	CG2	VAL	A	166	42.956	61.943	2.426	1.00	7.01	A
	ATOM	1144	C	VAL	A	166	42.414	60.096	4.560	1.00	6.42	A
	ATOM	1145	O	VAL	A	166	42.787	58.962	4.258	1.00	7.28	A
35	ATOM	1146	N	MSE	A	167	41.137	60.424	4.743	1.00	6.92	A
	ATOM	1147	CA	MSE	A	167	40.022	59.517	4.458	1.00	7.79	A
	ATOM	1148	CB	MSE	A	167	39.001	59.533	5.590	1.00	10.16	A
	ATOM	1149	CG	MSE	A	167	37.784	58.669	5.322	1.00	10.68	A
	ATOM	1150	SE	MSE	A	167	36.562	58.804	6.790	1.00	17.10	A
40	ATOM	1151	CE	MSE	A	167	37.703	58.023	8.131	1.00	10.95	A
	ATOM	1152	C	MSE	A	167	39.494	60.275	3.245	1.00	7.78	A
	ATOM	1153	O	MSE	A	167	38.701	61.204	3.368	1.00	7.60	A
	ATOM	1154	N	PRO	A	168	39.919	59.870	2.045	1.00	6.75	A
	ATOM	1155	CD	PRO	A	168	40.680	58.649	1.716	1.00	6.63	A
45	ATOM	1156	CA	PRO	A	168	39.499	60.558	0.829	1.00	7.01	A
	ATOM	1157	CB	PRO	A	168	40.437	59.975	-0.219	1.00	7.18	A
	ATOM	1158	CG	PRO	A	168	40.514	58.546	0.200	1.00	7.01	A
	ATOM	1159	C	PRO	A	168	38.070	60.528	0.355	1.00	6.98	A
	ATOM	1160	O	PRO	A	168	37.304	59.615	0.657	1.00	7.17	A
50	ATOM	1161	N	ASP	A	169	37.732	61.572	-0.395	1.00	6.85	A
	ATOM	1162	CA	ASP	A	169	36.439	61.673	-1.043	1.00	7.10	A
	ATOM	1163	CB	ASP	A	169	36.341	63.006	-1.790	1.00	7.46	A
	ATOM	1164	CG	ASP	A	169	35.205	63.039	-2.791	1.00	7.67	A
	ATOM	1165	OD1	ASP	A	169	34.118	62.511	-2.486	1.00	8.52	A
	ATOM	1166	OD2	ASP	A	169	35.399	63.609	-3.885	1.00	8.86	A
55	ATOM	1167	C	ASP	A	169	36.529	60.520	-2.035	1.00	7.30	A

5	ATOM	1168	O	ASP	A	169	37.622	60.171	-2.484	1.00	7.72	A
	ATOM	1169	N	GLU	A	170	35.397	59.917	-2.367	1.00	7.11	A
	ATOM	1170	CA	GLU	A	170	35.402	58.807	-3.308	1.00	7.03	A
	ATOM	1171	CB	GLU	A	170	34.793	57.568	-2.635	1.00	7.28	A
	ATOM	1172	CG	GLU	A	170	35.628	57.106	-1.433	1.00	6.70	A
10	ATOM	1173	CD	GLU	A	170	35.087	55.863	-0.743	1.00	8.50	A
	ATOM	1174	OE1	GLU	A	170	34.335	55.098	-1.377	1.00	8.21	A
	ATOM	1175	OE2	GLU	A	170	35.445	55.640	0.435	1.00	10.30	A
	ATOM	1176	C	GLU	A	170	34.678	59.144	-4.607	1.00	6.58	A
	ATOM	1177	O	GLU	A	170	34.651	58.338	-5.532	1.00	6.89	A
15	ATOM	1178	N	ALA	A	171	34.116	60.348	-4.689	1.00	6.82	A
	ATOM	1179	CA	ALA	A	171	33.395	60.760	-5.887	1.00	7.07	A
	ATOM	1180	CB	ALA	A	171	32.181	61.600	-5.496	1.00	7.61	A
	ATOM	1181	C	ALA	A	171	34.235	61.531	-6.900	1.00	7.36	A
	ATOM	1182	O	ALA	A	171	34.266	61.190	-8.077	1.00	7.95	A
20	ATOM	1183	N	ASN	A	172	34.919	62.568	-6.430	1.00	7.26	A
	ATOM	1184	CA	ASN	A	172	35.711	63.440	-7.293	1.00	7.01	A
	ATOM	1185	CB	ASN	A	172	35.647	64.866	-6.747	1.00	6.83	A
	ATOM	1186	CG	ASN	A	172	34.230	65.390	-6.639	1.00	8.36	A
	ATOM	1187	OD1	ASN	A	172	33.547	65.570	-7.645	1.00	10.35	A
25	ATOM	1188	ND2	ASN	A	172	33.784	65.645	-5.413	1.00	8.74	A
	ATOM	1189	C	ASN	A	172	37.176	63.059	-7.444	1.00	6.72	A
	ATOM	1190	O	ASN	A	172	37.838	63.476	-8.388	1.00	6.28	A
	ATOM	1191	N	SER	A	173	37.678	62.276	-6.505	1.00	6.15	A
	ATOM	1192	CA	SER	A	173	39.078	61.878	-6.510	1.00	5.69	A
30	ATOM	1193	CB	SER	A	173	39.411	61.182	-5.192	1.00	5.95	A
	ATOM	1194	OG	SER	A	173	38.522	60.099	-4.972	1.00	7.26	A
	ATOM	1195	C	SER	A	173	39.470	60.970	-7.661	1.00	5.64	A
	ATOM	1196	O	SER	A	173	38.714	60.081	-8.057	1.00	6.47	A
	ATOM	1197	N	HIS	A	174	40.660	61.201	-8.206	1.00	5.59	A
35	ATOM	1198	CA	HIS	A	174	41.154	60.349	-9.276	1.00	5.24	A
	ATOM	1199	CB	HIS	A	174	42.168	61.096	-10.130	1.00	5.98	A
	ATOM	1200	CG	HIS	A	174	42.448	60.421	-11.429	1.00	6.54	A
	ATOM	1201	CD2	HIS	A	174	42.041	60.711	-12.686	1.00	6.89	A
	ATOM	1202	ND1	HIS	A	174	43.161	59.244	-11.516	1.00	7.16	A
40	ATOM	1203	CE1	HIS	A	174	43.175	58.837	-12.772	1.00	7.66	A
	ATOM	1204	NE2	HIS	A	174	42.502	59.709	-13.501	1.00	8.19	A
	ATOM	1205	C	HIS	A	174	41.819	59.155	-8.587	1.00	5.74	A
	ATOM	1206	O	HIS	A	174	42.465	59.321	-7.553	1.00	5.68	A
	ATOM	1207	N	TRP	A	175	41.669	57.956	-9.141	1.00	4.96	A
45	ATOM	1208	CA	TRP	A	175	42.259	56.788	-8.496	1.00	5.44	A
	ATOM	1209	CB	TRP	A	175	41.995	55.505	-9.301	1.00	5.91	A
	ATOM	1210	CG	TRP	A	175	42.826	55.326	-10.548	1.00	5.89	A
	ATOM	1211	CD2	TRP	A	175	44.114	54.702	-10.634	1.00	6.41	A
	ATOM	1212	CE2	TRP	A	175	44.502	54.723	-11.992	1.00	6.86	A
50	ATOM	1213	CE3	TRP	A	175	44.979	54.125	-9.691	1.00	6.58	A
	ATOM	1214	CD1	TRP	A	175	42.493	55.694	-11.823	1.00	5.81	A
	ATOM	1215	NE1	TRP	A	175	43.495	55.332	-12.697	1.00	6.79	A
	ATOM	1216	CZ2	TRP	A	175	45.721	54.189	-12.434	1.00	6.92	A
	ATOM	1217	CZ3	TRP	A	175	46.190	53.594	-10.129	1.00	7.55	A
55	ATOM	1218	CH2	TRP	A	175	46.548	53.631	-11.491	1.00	7.43	A
	ATOM	1219	C	TRP	A	175	43.751	56.954	-8.260	1.00	6.06	A
	ATOM	1220	O	TRP	A	175	44.277	56.456	-7.272	1.00	6.00	A
	ATOM	1221	N	ARG	A	176	44.434	57.665	-9.152	1.00	6.01	A
	ATOM	1222	CA	ARG	A	176	45.868	57.866	-8.983	1.00	6.21	A

5	ATOM	1223	CB	ARG	A	176	46.434	58.611	-10.195	1.00	7.10	A
	ATOM	1224	CG	ARG	A	176	46.488	57.732	-11.429	1.00	7.74	A
	ATOM	1225	CD	ARG	A	176	46.454	58.549	-12.698	1.00	9.22	A
	ATOM	1226	NE	ARG	A	176	47.557	59.491	-12.790	1.00	9.75	A
	ATOM	1227	CZ	ARG	A	176	47.708	60.339	-13.801	1.00	10.35	A
	ATOM	1228	NH1	ARG	A	176	46.825	60.348	-14.791	1.00	10.58	A
	ATOM	1229	NH2	ARG	A	176	48.729	61.182	-13.817	1.00	11.03	A
	ATOM	1230	C	ARG	A	176	46.178	58.617	-7.690	1.00	5.98	A
10	ATOM	1231	O	ARG	A	176	47.167	58.317	-7.011	1.00	7.04	A
	ATOM	1232	N	ASN	A	177	45.329	59.579	-7.335	1.00	5.86	A
	ATOM	1233	CA	ASN	A	177	45.551	60.343	-6.110	1.00	5.50	A
	ATOM	1234	CB	ASN	A	177	44.900	61.723	-6.208	1.00	6.39	A
	ATOM	1235	CG	ASN	A	177	45.571	62.590	-7.241	1.00	8.49	A
15	ATOM	1236	OD1	ASN	A	177	46.756	62.416	-7.528	1.00	7.81	A
	ATOM	1237	ND2	ASN	A	177	44.825	63.533	-7.806	1.00	9.47	A
	ATOM	1238	C	ASN	A	177	45.065	59.598	-4.877	1.00	5.82	A
	ATOM	1239	O	ASN	A	177	45.568	59.814	-3.768	1.00	5.55	A
	ATOM	1240	N	VAL	A	178	44.086	58.721	-5.059	1.00	5.11	A
20	ATOM	1241	CA	VAL	A	178	43.619	57.922	-3.934	1.00	5.43	A
	ATOM	1242	CB	VAL	A	178	42.405	57.054	-4.310	1.00	5.87	A
	ATOM	1243	CG1	VAL	A	178	42.125	56.045	-3.199	1.00	6.99	A
	ATOM	1244	CG2	VAL	A	178	41.189	57.933	-4.523	1.00	7.19	A
	ATOM	1245	C	VAL	A	178	44.794	57.013	-3.570	1.00	5.88	A
25	ATOM	1246	O	VAL	A	178	45.102	56.816	-2.396	1.00	6.98	A
	ATOM	1247	N	LEU	A	179	45.463	56.469	-4.581	1.00	6.29	A
	ATOM	1248	CA	LEU	A	179	46.609	55.606	-4.321	1.00	6.10	A
	ATOM	1249	CB	LEU	A	179	47.081	54.914	-5.610	1.00	6.48	A
	ATOM	1250	CG	LEU	A	179	48.388	54.104	-5.494	1.00	6.83	A
30	ATOM	1251	CD1	LEU	A	179	48.249	52.970	-4.471	1.00	7.54	A
	ATOM	1252	CD2	LEU	A	179	48.737	53.534	-6.862	1.00	7.81	A
	ATOM	1253	C	LEU	A	179	47.760	56.409	-3.720	1.00	6.01	A
	ATOM	1254	O	LEU	A	179	48.436	55.947	-2.801	1.00	5.97	A
	ATOM	1255	N	LEU	A	180	47.971	57.619	-4.234	1.00	5.99	A
35	ATOM	1256	CA	LEU	A	180	49.047	58.476	-3.751	1.00	5.46	A
	ATOM	1257	CB	LEU	A	180	49.034	59.816	-4.493	1.00	6.21	A
	ATOM	1258	CG	LEU	A	180	50.171	60.777	-4.137	1.00	8.11	A
	ATOM	1259	CD1	LEU	A	180	51.464	60.276	-4.762	1.00	8.40	A
	ATOM	1260	CD2	LEU	A	180	49.844	62.174	-4.644	1.00	8.88	A
40	ATOM	1261	C	LEU	A	180	48.917	58.733	-2.259	1.00	5.49	A
	ATOM	1262	O	LEU	A	180	49.873	58.539	-1.504	1.00	6.38	A
	ATOM	1263	N	GLN	A	181	47.732	59.147	-1.823	1.00	5.36	A
	ATOM	1264	CA	GLN	A	181	47.558	59.450	-0.408	1.00	6.03	A
	ATOM	1265	CB	GLN	A	181	46.263	60.243	-0.177	1.00	6.02	A
45	ATOM	1266	CG	GLN	A	181	44.963	59.508	-0.445	1.00	7.15	A
	ATOM	1267	CD	GLN	A	181	44.584	58.572	0.681	1.00	6.82	A
	ATOM	1268	OE1	GLN	A	181	44.809	58.871	1.858	1.00	7.67	A
	ATOM	1269	NE2	GLN	A	181	43.983	57.445	0.330	1.00	8.04	A
	ATOM	1270	C	GLN	A	181	47.616	58.203	0.466	1.00	5.96	A
50	ATOM	1271	O	GLN	A	181	48.110	58.257	1.593	1.00	6.48	A
	ATOM	1272	N	LEU	A	182	47.137	57.073	-0.052	1.00	5.92	A
	ATOM	1273	CA	LEU	A	182	47.190	55.826	0.709	1.00	5.60	A
	ATOM	1274	CB	LEU	A	182	46.467	54.701	-0.037	1.00	6.36	A
	ATOM	1275	CG	LEU	A	182	46.529	53.321	0.626	1.00	6.42	A
55	ATOM	1276	CD1	LEU	A	182	45.774	53.341	1.957	1.00	7.96	A
	ATOM	1277	CD2	LEU	A	182	45.924	52.275	-0.313	1.00	7.27	A

5	ATOM	1278	C	LEU	A	182	48.654	55.448	0.900	1.00	6.22	A
	ATOM	1279	O	LEU	A	182	49.071	55.048	1.986	1.00	6.59	A
	ATOM	1280	N	THR	A	183	49.437	55.590	-0.163	1.00	6.40	A
	ATOM	1281	CA	THR	A	183	50.854	55.254	-0.103	1.00	6.70	A
	ATOM	1282	CB	THR	A	183	51.488	55.323	-1.510	1.00	7.61	A
10	ATOM	1283	OG1	THR	A	183	50.795	54.429	-2.392	1.00	6.66	A
	ATOM	1284	CG2	THR	A	183	52.948	54.924	-1.453	1.00	8.69	A
	ATOM	1285	C	THR	A	183	51.601	56.197	0.843	1.00	6.95	A
	ATOM	1286	O	THR	A	183	52.477	55.773	1.594	1.00	6.77	A
	ATOM	1287	N	GLU	A	184	51.248	57.477	0.815	1.00	6.54	A
15	ATOM	1288	CA	GLU	A	184	51.907	58.454	1.678	1.00	7.23	A
	ATOM	1289	CB	GLU	A	184	51.345	59.852	1.399	1.00	8.96	A
	ATOM	1290	CG	GLU	A	184	52.194	61.013	1.919	1.00	10.85	A
	ATOM	1291	CD	GLU	A	184	53.598	61.053	1.324	1.00	11.51	A
	ATOM	1292	OE1	GLU	A	184	53.778	60.668	0.149	1.00	13.38	A
20	ATOM	1293	OE2	GLU	A	184	54.523	61.490	2.037	1.00	14.02	A
	ATOM	1294	C	GLU	A	184	51.704	58.082	3.148	1.00	7.89	A
	ATOM	1295	O	GLU	A	184	52.651	58.072	3.938	1.00	8.95	A
	ATOM	1296	N	GLY	A	185	50.465	57.767	3.506	1.00	7.49	A
	ATOM	1297	CA	GLY	A	185	50.165	57.395	4.876	1.00	7.51	A
25	ATOM	1298	C	GLY	A	185	50.754	56.056	5.292	1.00	7.61	A
	ATOM	1299	O	GLY	A	185	51.324	55.934	6.379	1.00	7.79	A
	ATOM	1300	N	GLN	A	186	50.638	55.045	4.437	1.00	7.55	A
	ATOM	1301	CA	GLN	A	186	51.154	53.732	4.803	1.00	7.94	A
	ATOM	1302	CB	GLN	A	186	50.573	52.653	3.890	1.00	7.79	A
30	ATOM	1303	CG	GLN	A	186	49.075	52.469	4.067	1.00	9.35	A
	ATOM	1304	CD	GLN	A	186	48.647	51.045	3.819	1.00	10.10	A
	ATOM	1305	OE1	GLN	A	186	49.239	50.349	2.999	1.00	12.28	A
	ATOM	1306	NE2	GLN	A	186	47.615	50.598	4.525	1.00	9.16	A
	ATOM	1307	C	GLN	A	186	52.670	53.652	4.802	1.00	8.34	A
35	ATOM	1308	O	GLN	A	186	53.251	52.893	5.575	1.00	7.45	A
	ATOM	1309	N	THR	A	187	53.322	54.417	3.937	1.00	8.73	A
	ATOM	1310	CA	THR	A	187	54.776	54.393	3.914	1.00	8.31	A
	ATOM	1311	CB	THR	A	187	55.313	55.199	2.723	1.00	8.96	A
	ATOM	1312	OG1	THR	A	187	54.836	54.603	1.510	1.00	8.94	A
40	ATOM	1313	CG2	THR	A	187	56.839	55.194	2.709	1.00	9.08	A
	ATOM	1314	C	THR	A	187	55.280	54.966	5.239	1.00	8.89	A
	ATOM	1315	O	THR	A	187	56.236	54.451	5.826	1.00	8.76	A
	ATOM	1316	N	TRP	A	188	54.620	56.016	5.720	1.00	8.63	A
	ATOM	1317	CA	TRP	A	188	54.992	56.628	6.989	1.00	8.92	A
45	ATOM	1318	CB	TRP	A	188	54.131	57.863	7.265	1.00	9.67	A
	ATOM	1319	CG	TRP	A	188	54.583	58.643	8.464	1.00	9.58	A
	ATOM	1320	CD2	TRP	A	188	54.248	58.383	9.834	1.00	9.95	A
	ATOM	1321	CE2	TRP	A	188	54.973	59.304	10.622	1.00	10.10	A
	ATOM	1322	CE3	TRP	A	188	53.409	57.458	10.472	1.00	9.95	A
50	ATOM	1323	CD1	TRP	A	188	55.466	59.685	8.477	1.00	10.29	A
	ATOM	1324	NE1	TRP	A	188	55.708	60.086	9.770	1.00	10.60	A
	ATOM	1325	CZ2	TRP	A	188	54.888	59.328	12.018	1.00	9.73	A
	ATOM	1326	CZ3	TRP	A	188	53.325	57.480	11.866	1.00	10.52	A
	ATOM	1327	CH2	TRP	A	188	54.062	58.411	12.621	1.00	10.61	A
55	ATOM	1328	C	TRP	A	188	54.773	55.604	8.104	1.00	8.69	A
	ATOM	1329	O	TRP	A	188	55.635	55.399	8.958	1.00	8.79	A
	ATOM	1330	N	LEU	A	189	53.614	54.955	8.097	1.00	8.25	A
	ATOM	1331	CA	LEU	A	189	53.323	53.962	9.126	1.00	9.12	A
	ATOM	1332	CB	LEU	A	189	51.918	53.387	8.936	1.00	8.95	A

5	ATOM	1333	CG	LEU	A	189	50.767	54.284	9.391	1.00	8.34	A
	ATOM	1334	CD1	LEU	A	189	49.438	53.610	9.072	1.00	9.27	A
	ATOM	1335	CD2	LEU	A	189	50.883	54.545	10.894	1.00	9.17	A
	ATOM	1336	C	LEU	A	189	54.332	52.820	9.155	1.00	9.47	A
	ATOM	1337	O	LEU	A	189	54.736	52.371	10.229	1.00	10.32	A
10	ATOM	1338	N	LYS	A	190	54.743	52.340	7.989	1.00	8.83	A
	ATOM	1339	CA	LYS	A	190	55.699	51.240	7.965	1.00	10.73	A
	ATOM	1340	CB	LYS	A	190	55.904	50.721	6.538	1.00	11.97	A
	ATOM	1341	CG	LYS	A	190	56.763	49.460	6.471	1.00	14.62	A
	ATOM	1342	CD	LYS	A	190	56.884	48.941	5.050	1.00	18.07	A
15	ATOM	1343	CE	LYS	A	190	57.597	47.600	5.015	1.00	20.94	A
	ATOM	1344	NZ	LYS	A	190	58.942	47.678	5.649	1.00	22.98	A
	ATOM	1345	C	LYS	A	190	57.037	51.682	8.543	1.00	11.26	A
	ATOM	1346	O	LYS	A	190	57.650	50.964	9.333	1.00	11.22	A
	ATOM	1347	N	GLN	A	191	57.479	52.872	8.157	1.00	11.65	A
20	ATOM	1348	CA	GLN	A	191	58.753	53.396	8.625	1.00	14.13	A
	ATOM	1349	CB	GLN	A	191	59.132	54.655	7.836	1.00	15.24	A
	ATOM	1350	CG	GLN	A	191	60.462	55.263	8.265	1.00	19.98	A
	ATOM	1351	CD	GLN	A	191	60.871	56.459	7.425	1.00	21.27	A
	ATOM	1352	OE1	GLN	A	191	61.906	57.079	7.675	1.00	24.60	A
25	ATOM	1353	NE2	GLN	A	191	60.063	56.789	6.422	1.00	22.87	A
	ATOM	1354	C	GLN	A	191	58.798	53.711	10.116	1.00	14.03	A
	ATOM	1355	O	GLN	A	191	59.758	53.345	10.797	1.00	16.11	A
	ATOM	1356	N	PHE	A	192	57.766	54.372	10.631	1.00	13.64	A
	ATOM	1357	CA	PHE	A	192	57.760	54.756	12.040	1.00	13.50	A
30	ATOM	1358	CB	PHE	A	192	57.333	56.220	12.166	1.00	13.17	A
	ATOM	1359	CG	PHE	A	192	58.233	57.171	11.433	1.00	13.74	A
	ATOM	1360	CD1	PHE	A	192	57.918	57.600	10.147	1.00	13.68	A
	ATOM	1361	CD2	PHE	A	192	59.418	57.611	12.014	1.00	14.33	A
	ATOM	1362	CE1	PHE	A	192	58.768	58.453	9.449	1.00	13.88	A
35	ATOM	1363	CE2	PHE	A	192	60.278	58.466	11.322	1.00	14.18	A
	ATOM	1364	CZ	PHE	A	192	59.952	58.887	10.040	1.00	14.41	A
	ATOM	1365	C	PHE	A	192	56.971	53.908	13.040	1.00	14.01	A
	ATOM	1366	O	PHE	A	192	57.338	53.864	14.216	1.00	15.20	A
	ATOM	1367	N	MSE	A	193	55.901	53.248	12.598	1.00	12.52	A
40	ATOM	1368	CA	MSE	A	193	55.093	52.408	13.496	1.00	13.30	A
	ATOM	1369	CB	MSE	A	193	53.587	52.680	13.337	1.00	15.39	A
	ATOM	1370	CG	MSE	A	193	53.007	53.917	14.029	1.00	17.42	A
	ATOM	1371	SE	MSE	A	193	53.504	54.201	15.886	1.00	27.71	A
	ATOM	1372	CE	MSE	A	193	54.844	55.450	15.340	1.00	9.34	A
45	ATOM	1373	C	MSE	A	193	55.312	50.919	13.235	1.00	13.10	A
	ATOM	1374	O	MSE	A	193	54.889	50.077	14.027	1.00	13.59	A
	ATOM	1375	N	ASN	A	194	55.954	50.599	12.118	1.00	12.20	A
	ATOM	1376	CA	ASN	A	194	56.204	49.212	11.739	1.00	12.23	A
	ATOM	1377	CB	ASN	A	194	57.146	48.540	12.747	1.00	13.82	A
50	ATOM	1378	CG	ASN	A	194	57.600	47.163	12.295	1.00	15.07	A
	ATOM	1379	OD1	ASN	A	194	57.775	46.920	11.099	1.00	16.05	A
	ATOM	1380	ND2	ASN	A	194	57.804	46.268	13.258	1.00	16.16	A
	ATOM	1381	C	ASN	A	194	54.902	48.416	11.628	1.00	12.35	A
	ATOM	1382	O	ASN	A	194	54.803	47.287	12.114	1.00	12.62	A
55	ATOM	1383	N	VAL	A	195	53.899	49.017	10.998	1.00	11.62	A
	ATOM	1384	CA	VAL	A	195	52.616	48.353	10.806	1.00	12.01	A
	ATOM	1385	CB	VAL	A	195	51.599	48.684	11.937	1.00	12.67	A
	ATOM	1386	CG1	VAL	A	195	52.148	48.252	13.288	1.00	14.48	A
	ATOM	1387	CG2	VAL	A	195	51.268	50.165	11.935	1.00	12.78	A

5	ATOM	1388	C	VAL	A	195	52.000	48.793	9.486	1.00	11.41	A
	ATOM	1389	O	VAL	A	195	52.227	49.914	9.029	1.00	10.81	A
	ATOM	1390	N	THR	A	196	51.230	47.894	8.882	1.00	10.57	A
	ATOM	1391	CA	THR	A	196	50.536	48.171	7.627	1.00	10.52	A
	ATOM	1392	CB	THR	A	196	51.191	47.438	6.429	1.00	10.51	A
10	ATOM	1393	OG1	THR	A	196	52.554	47.862	6.288	1.00	11.89	A
	ATOM	1394	CG2	THR	A	196	50.440	47.753	5.143	1.00	11.97	A
	ATOM	1395	C	THR	A	196	49.096	47.680	7.785	1.00	10.00	A
	ATOM	1396	O	THR	A	196	48.838	46.476	7.812	1.00	10.58	A
	ATOM	1397	N	PRO	A	197	48.137	48.610	7.903	1.00	9.62	A
15	ATOM	1398	CD	PRO	A	197	48.314	50.068	8.022	1.00	9.15	A
	ATOM	1399	CA	PRO	A	197	46.727	48.245	8.060	1.00	9.26	A
	ATOM	1400	CB	PRO	A	197	46.024	49.600	8.096	1.00	9.55	A
	ATOM	1401	CG	PRO	A	197	47.040	50.487	8.717	1.00	9.10	A
	ATOM	1402	C	PRO	A	197	46.192	47.375	6.929	1.00	9.50	A
20	ATOM	1403	O	PRO	A	197	46.534	47.579	5.762	1.00	9.51	A
	ATOM	1404	N	THR	A	198	45.355	46.404	7.279	1.00	9.16	A
	ATOM	1405	CA	THR	A	198	44.743	45.540	6.278	1.00	9.69	A
	ATOM	1406	CB	THR	A	198	45.125	44.060	6.466	1.00	10.81	A
	ATOM	1407	OG1	THR	A	198	44.660	43.600	7.739	1.00	11.74	A
25	ATOM	1408	CG2	THR	A	198	46.635	43.887	6.368	1.00	11.84	A
	ATOM	1409	C	THR	A	198	43.229	45.682	6.363	1.00	8.80	A
	ATOM	1410	O	THR	A	198	42.491	44.986	5.671	1.00	8.81	A
	ATOM	1411	N	ALA	A	199	42.776	46.586	7.227	1.00	8.53	A
	ATOM	1412	CA	ALA	A	199	41.353	46.865	7.387	1.00	8.67	A
30	ATOM	1413	CB	ALA	A	199	40.887	46.477	8.790	1.00	9.80	A
	ATOM	1414	C	ALA	A	199	41.146	48.360	7.157	1.00	8.79	A
	ATOM	1415	O	ALA	A	199	41.870	49.182	7.721	1.00	8.61	A
	ATOM	1416	N	SER	A	200	40.162	48.707	6.332	1.00	8.10	A
	ATOM	1417	CA	SER	A	200	39.873	50.102	6.023	1.00	8.52	A
35	ATOM	1418	CB	SER	A	200	39.724	50.280	4.511	1.00	8.51	A
	ATOM	1419	OG	SER	A	200	39.498	51.638	4.174	1.00	10.82	A
	ATOM	1420	C	SER	A	200	38.620	50.603	6.740	1.00	8.16	A
	ATOM	1421	O	SER	A	200	37.663	49.854	6.951	1.00	8.18	A
	ATOM	1422	N	TRP	A	201	38.646	51.882	7.101	1.00	8.42	A
40	ATOM	1423	CA	TRP	A	201	37.563	52.539	7.827	1.00	8.34	A
	ATOM	1424	CB	TRP	A	201	38.057	52.782	9.263	1.00	8.58	A
	ATOM	1425	CG	TRP	A	201	37.224	53.618	10.202	1.00	8.17	A
	ATOM	1426	CD2	TRP	A	201	36.231	53.144	11.123	1.00	9.44	A
	ATOM	1427	CE2	TRP	A	201	35.838	54.245	11.919	1.00	9.61	A
45	ATOM	1428	CE3	TRP	A	201	35.641	51.896	11.359	1.00	10.07	A
	ATOM	1429	CD1	TRP	A	201	37.375	54.950	10.461	1.00	9.35	A
	ATOM	1430	NE1	TRP	A	201	36.552	55.333	11.492	1.00	9.72	A
	ATOM	1431	CZ2	TRP	A	201	34.882	54.135	12.935	1.00	9.92	A
	ATOM	1432	CZ3	TRP	A	201	34.688	51.784	12.372	1.00	10.54	A
50	ATOM	1433	CH2	TRP	A	201	34.321	52.900	13.147	1.00	10.12	A
	ATOM	1434	C	TRP	A	201	37.220	53.844	7.111	1.00	8.73	A
	ATOM	1435	O	TRP	A	201	37.995	54.796	7.144	1.00	9.70	A
	ATOM	1436	N	ALA	A	202	36.066	53.873	6.447	1.00	8.52	A
	ATOM	1437	CA	ALA	A	202	35.617	55.062	5.716	1.00	8.40	A
55	ATOM	1438	CB	ALA	A	202	35.678	54.808	4.211	1.00	9.54	A
	ATOM	1439	C	ALA	A	202	34.192	55.400	6.144	1.00	8.89	A
	ATOM	1440	O	ALA	A	202	33.220	55.018	5.495	1.00	8.55	A
	ATOM	1441	N	ILE	A	203	34.082	56.134	7.242	1.00	8.07	A
	ATOM	1442	CA	ILE	A	203	32.785	56.484	7.800	1.00	8.51	A

5	ATOM	1443	CB	ILE	A	203	32.842	56.503	9.354	1.00	8.05	A
	ATOM	1444	CG2	ILE	A	203	33.116	55.091	9.885	1.00	8.11	A
	ATOM	1445	CG1	ILE	A	203	33.907	57.500	9.832	1.00	9.39	A
	ATOM	1446	CD1	ILE	A	203	33.900	57.737	11.341	1.00	8.65	A
	ATOM	1447	C	ILE	A	203	32.186	57.806	7.348	1.00	8.80	A
10	ATOM	1448	O	ILE	A	203	31.025	58.073	7.648	1.00	8.92	A
	ATOM	1449	N	ASP	A	204	32.939	58.621	6.609	1.00	8.61	A
	ATOM	1450	CA	ASP	A	204	32.408	59.923	6.216	1.00	9.22	A
	ATOM	1451	CB	ASP	A	204	33.146	61.022	6.987	1.00	8.73	A
	ATOM	1452	CG	ASP	A	204	32.240	62.188	7.356	1.00	9.80	A
15	ATOM	1453	OD1	ASP	A	204	32.765	63.280	7.652	1.00	9.95	A
	ATOM	1454	OD2	ASP	A	204	31.004	62.019	7.370	1.00	10.59	A
	ATOM	1455	C	ASP	A	204	32.318	60.338	4.739	1.00	9.40	A
	ATOM	1456	O	ASP	A	204	31.638	61.318	4.433	1.00	10.33	A
	ATOM	1457	N	PRO	A	205	33.009	59.641	3.815	1.00	9.27	A
20	ATOM	1458	CD	PRO	A	205	34.005	58.559	3.926	1.00	10.07	A
	ATOM	1459	CA	PRO	A	205	32.872	60.086	2.418	1.00	9.44	A
	ATOM	1460	CB	PRO	A	205	33.667	59.040	1.641	1.00	10.86	A
	ATOM	1461	CG	PRO	A	205	34.756	58.679	2.611	1.00	11.93	A
	ATOM	1462	C	PRO	A	205	31.384	60.090	2.055	1.00	9.61	A
25	ATOM	1463	O	PRO	A	205	30.629	59.244	2.530	1.00	10.30	A
	ATOM	1464	N	PHE	A	206	30.964	61.032	1.214	1.00	9.55	A
	ATOM	1465	CA	PHE	A	206	29.544	61.153	0.867	1.00	9.41	A
	ATOM	1466	CB	PHE	A	206	29.220	62.618	0.553	1.00	9.27	A
	ATOM	1467	CG	PHE	A	206	30.037	63.607	1.354	1.00	9.04	A
30	ATOM	1468	CD1	PHE	A	206	30.301	63.389	2.705	1.00	8.94	A
	ATOM	1469	CD2	PHE	A	206	30.555	64.749	0.748	1.00	9.10	A
	ATOM	1470	CE1	PHE	A	206	31.074	64.294	3.440	1.00	8.93	A
	ATOM	1471	CE2	PHE	A	206	31.326	65.660	1.475	1.00	9.22	A
	ATOM	1472	CZ	PHE	A	206	31.587	65.431	2.821	1.00	9.28	A
35	ATOM	1473	C	PHE	A	206	29.169	60.246	-0.301	1.00	9.31	A
	ATOM	1474	O	PHE	A	206	28.950	60.696	-1.427	1.00	9.75	A
	ATOM	1475	N	GLY	A	207	29.062	58.958	-0.005	1.00	8.61	A
	ATOM	1476	CA	GLY	A	207	28.775	57.982	-1.037	1.00	8.81	A
	ATOM	1477	C	GLY	A	207	30.072	57.210	-1.191	1.00	8.17	A
40	ATOM	1478	O	GLY	A	207	31.137	57.730	-0.858	1.00	8.29	A
	ATOM	1479	N	HIS	A	208	30.001	55.990	-1.712	1.00	7.51	A
	ATOM	1480	CA	HIS	A	208	31.190	55.155	-1.851	1.00	7.28	A
	ATOM	1481	CB	HIS	A	208	31.135	54.027	-0.819	1.00	7.61	A
	ATOM	1482	CG	HIS	A	208	31.256	54.505	0.596	1.00	8.45	A
45	ATOM	1483	CD2	HIS	A	208	30.314	54.797	1.523	1.00	8.55	A
	ATOM	1484	ND1	HIS	A	208	32.471	54.778	1.185	1.00	9.69	A
	ATOM	1485	CE1	HIS	A	208	32.273	55.218	2.415	1.00	10.15	A
	ATOM	1486	NE2	HIS	A	208	30.973	55.240	2.645	1.00	9.28	A
	ATOM	1487	C	HIS	A	208	31.401	54.574	-3.242	1.00	7.09	A
50	ATOM	1488	O	HIS	A	208	30.449	54.248	-3.960	1.00	7.30	A
	ATOM	1489	N	SER	A	209	32.673	54.429	-3.600	1.00	6.59	A
	ATOM	1490	CA	SER	A	209	33.068	53.925	-4.907	1.00	6.62	A
	ATOM	1491	CB	SER	A	209	33.960	54.960	-5.598	1.00	6.86	A
	ATOM	1492	OG	SER	A	209	34.520	54.434	-6.790	1.00	6.54	A
55	ATOM	1493	C	SER	A	209	33.813	52.599	-4.864	1.00	7.08	A
	ATOM	1494	O	SER	A	209	34.622	52.360	-3.972	1.00	6.40	A
	ATOM	1495	N	PRO	A	210	33.548	51.717	-5.841	1.00	7.03	A
	ATOM	1496	CD	PRO	A	210	32.525	51.830	-6.895	1.00	7.72	A
	ATOM	1497	CA	PRO	A	210	34.221	50.415	-5.898	1.00	7.22	A

5	ATOM	1498	CB	PRO	A	210	33.456	49.675	-6.997	1.00	7.15	A
	ATOM	1499	CG	PRO	A	210	32.977	50.795	-7.889	1.00	7.88	A
	ATOM	1500	C	PRO	A	210	35.712	50.582	-6.211	1.00	7.12	A
	ATOM	1501	O	PRO	A	210	36.481	49.620	-6.181	1.00	6.74	A
	ATOM	1502	N	THR	A	211	36.124	51.806	-6.529	1.00	6.80	A
	ATOM	1503	CA	THR	A	211	37.531	52.044	-6.793	1.00	7.50	A
	ATOM	1504	CB	THR	A	211	37.762	53.482	-7.288	1.00	7.37	A
	ATOM	1505	OG1	THR	A	211	37.233	53.596	-8.613	1.00	8.05	A
10	ATOM	1506	CG2	THR	A	211	39.250	53.833	-7.292	1.00	8.53	A
	ATOM	1507	C	THR	A	211	38.321	51.800	-5.510	1.00	7.51	A
	ATOM	1508	O	THR	A	211	39.492	51.420	-5.554	1.00	7.20	A
	ATOM	1509	N	MSE	A	212	37.678	52.017	-4.365	1.00	8.07	A
15	ATOM	1510	CA	MSE	A	212	38.349	51.801	-3.087	1.00	8.67	A
	ATOM	1511	CB	MSE	A	212	37.480	52.311	-1.933	1.00	11.85	A
	ATOM	1512	CG	MSE	A	212	37.190	53.803	-2.011	1.00	16.12	A
	ATOM	1513	SE	MSE	A	212	38.764	54.895	-2.346	1.00	25.32	A
	ATOM	1514	CE	MSE	A	212	39.602	54.743	-0.621	1.00	21.14	A
	ATOM	1515	C	MSE	A	212	38.735	50.333	-2.883	1.00	8.11	A
	ATOM	1516	O	MSE	A	212	39.910	50.025	-2.667	1.00	7.43	A
	ATOM	1517	N	PRO	A	213	37.762	49.403	-2.937	1.00	7.29	A
20	ATOM	1518	CD	PRO	A	213	36.293	49.497	-2.956	1.00	7.20	A
	ATOM	1519	CA	PRO	A	213	38.192	48.014	-2.751	1.00	7.53	A
	ATOM	1520	CB	PRO	A	213	36.876	47.222	-2.776	1.00	8.34	A
	ATOM	1521	CG	PRO	A	213	35.903	48.141	-3.484	1.00	7.20	A
25	ATOM	1522	C	PRO	A	213	39.173	47.581	-3.843	1.00	7.60	A
	ATOM	1523	O	PRO	A	213	40.033	46.734	-3.609	1.00	7.87	A
	ATOM	1524	N	TYR	A	214	39.053	48.166	-5.034	1.00	7.06	A
	ATOM	1525	CA	TYR	A	214	39.960	47.822	-6.131	1.00	8.43	A
30	ATOM	1526	CB	TYR	A	214	39.659	48.668	-7.367	1.00	8.58	A
	ATOM	1527	CG	TYR	A	214	40.588	48.408	-8.538	1.00	9.57	A
	ATOM	1528	CD1	TYR	A	214	40.374	47.332	-9.398	1.00	11.97	A
	ATOM	1529	CE1	TYR	A	214	41.196	47.123	-10.507	1.00	12.57	A
35	ATOM	1530	CD2	TYR	A	214	41.656	49.264	-8.808	1.00	8.93	A
	ATOM	1531	CE2	TYR	A	214	42.484	49.063	-9.908	1.00	10.94	A
	ATOM	1532	CZ	TYR	A	214	42.246	47.996	-10.757	1.00	11.50	A
	ATOM	1533	OH	TYR	A	214	43.038	47.822	-11.874	1.00	13.46	A
40	ATOM	1534	C	TYR	A	214	41.402	48.078	-5.705	1.00	8.88	A
	ATOM	1535	O	TYR	A	214	42.256	47.190	-5.783	1.00	9.14	A
	ATOM	1536	N	ILE	A	215	41.665	49.305	-5.262	1.00	7.76	A
	ATOM	1537	CA	ILE	A	215	42.996	49.702	-4.825	1.00	7.71	A
45	ATOM	1538	CB	ILE	A	215	43.060	51.229	-4.594	1.00	7.35	A
	ATOM	1539	CG2	ILE	A	215	44.404	51.616	-3.975	1.00	7.15	A
	ATOM	1540	CG1	ILE	A	215	42.850	51.961	-5.920	1.00	8.07	A
	ATOM	1541	CD1	ILE	A	215	42.746	53.466	-5.778	1.00	10.41	A
50	ATOM	1542	C	ILE	A	215	43.410	48.990	-3.536	1.00	7.79	A
	ATOM	1543	O	ILE	A	215	44.530	48.491	-3.424	1.00	7.37	A
	ATOM	1544	N	LEU	A	216	42.500	48.931	-2.571	1.00	7.76	A
	ATOM	1545	CA	LEU	A	216	42.799	48.298	-1.290	1.00	7.87	A
55	ATOM	1546	CB	LEU	A	216	41.606	48.452	-0.338	1.00	7.69	A
	ATOM	1547	CG	LEU	A	216	41.251	49.889	0.065	1.00	9.45	A
	ATOM	1548	CD1	LEU	A	216	39.960	49.897	0.863	1.00	10.13	A
	ATOM	1549	CD2	LEU	A	216	42.393	50.495	0.876	1.00	10.14	A
55	ATOM	1550	C	LEU	A	216	43.170	46.823	-1.419	1.00	8.19	A
	ATOM	1551	O	LEU	A	216	44.148	46.371	-0.823	1.00	7.52	A
	ATOM	1552	N	GLN	A	217	42.392	46.081	-2.201	1.00	8.30	A

5	ATOM	1553	CA	GLN	A	217	42.639	44.654	-2.381	1.00	8.72	A
	ATOM	1554	CB	GLN	A	217	41.504	44.043	-3.210	1.00	10.69	A
	ATOM	1555	CG	GLN	A	217	41.475	42.521	-3.264	1.00	11.14	A
	ATOM	1556	CD	GLN	A	217	42.430	41.960	-4.290	1.00	13.44	A
	ATOM	1557	OE1	GLN	A	217	42.639	42.561	-5.342	1.00	14.29	A
	ATOM	1558	NE2	GLN	A	217	43.002	40.796	-4.001	1.00	14.07	A
	ATOM	1559	C	GLN	A	217	44.002	44.415	-3.035	1.00	9.26	A
	ATOM	1560	O	GLN	A	217	44.649	43.394	-2.792	1.00	10.31	A
10	ATOM	1561	N	LYS	A	218	44.442	45.367	-3.854	1.00	8.72	A
	ATOM	1562	CA	LYS	A	218	45.738	45.277	-4.522	1.00	8.85	A
	ATOM	1563	CB	LYS	A	218	45.673	45.974	-5.884	1.00	9.16	A
	ATOM	1564	CG	LYS	A	218	44.893	45.182	-6.925	1.00	9.85	A
15	ATOM	1565	CD	LYS	A	218	44.682	45.996	-8.195	1.00	8.97	A
	ATOM	1566	CE	LYS	A	218	44.293	45.113	-9.372	1.00	11.30	A
	ATOM	1567	NZ	LYS	A	218	43.099	44.252	-9.123	1.00	12.85	A
	ATOM	1568	C	LYS	A	218	46.837	45.899	-3.657	1.00	9.01	A
	ATOM	1569	O	LYS	A	218	47.991	46.024	-4.079	1.00	8.66	A
20	ATOM	1570	N	SER	A	219	46.469	46.286	-2.441	1.00	8.09	A
	ATOM	1571	CA	SER	A	219	47.414	46.886	-1.513	1.00	8.36	A
	ATOM	1572	CB	SER	A	219	47.055	48.354	-1.260	1.00	7.23	A
	ATOM	1573	OG	SER	A	219	47.135	49.106	-2.464	1.00	8.36	A
	ATOM	1574	C	SER	A	219	47.467	46.119	-0.192	1.00	7.81	A
25	ATOM	1575	O	SER	A	219	47.783	46.688	0.852	1.00	8.25	A
	ATOM	1576	N	GLY	A	220	47.144	44.828	-0.256	1.00	8.61	A
	ATOM	1577	CA	GLY	A	220	47.196	43.969	0.918	1.00	8.94	A
	ATOM	1578	C	GLY	A	220	45.996	43.912	1.847	1.00	9.36	A
	ATOM	1579	O	GLY	A	220	45.996	43.126	2.794	1.00	9.85	A
30	ATOM	1580	N	PHE	A	221	44.971	44.717	1.593	1.00	9.14	A
	ATOM	1581	CA	PHE	A	221	43.805	44.721	2.471	1.00	8.46	A
	ATOM	1582	CB	PHE	A	221	42.925	45.940	2.198	1.00	7.99	A
	ATOM	1583	CG	PHE	A	221	43.475	47.212	2.752	1.00	7.21	A
	ATOM	1584	CD1	PHE	A	221	44.593	47.813	2.176	1.00	7.00	A
35	ATOM	1585	CD2	PHE	A	221	42.881	47.812	3.858	1.00	7.00	A
	ATOM	1586	CE1	PHE	A	221	45.112	48.993	2.695	1.00	6.41	A
	ATOM	1587	CE2	PHE	A	221	43.389	48.990	4.387	1.00	7.19	A
	ATOM	1588	CZ	PHE	A	221	44.511	49.587	3.804	1.00	7.27	A
	ATOM	1589	C	PHE	A	221	42.945	43.475	2.388	1.00	8.81	A
40	ATOM	1590	O	PHE	A	221	42.883	42.812	1.354	1.00	9.31	A
	ATOM	1591	N	LYS	A	222	42.269	43.178	3.493	1.00	9.34	A
	ATOM	1592	CA	LYS	A	222	41.393	42.024	3.575	1.00	10.17	A
	ATOM	1593	CB	LYS	A	222	41.963	41.009	4.568	1.00	13.29	A
	ATOM	1594	CG	LYS	A	222	43.259	40.373	4.095	1.00	17.15	A
45	ATOM	1595	CD	LYS	A	222	43.759	39.319	5.065	1.00	21.70	A
	ATOM	1596	CE	LYS	A	222	44.853	38.475	4.430	1.00	23.71	A
	ATOM	1597	NZ	LYS	A	222	45.964	39.310	3.898	1.00	25.58	A
	ATOM	1598	C	LYS	A	222	39.976	42.409	3.988	1.00	9.40	A
	ATOM	1599	O	LYS	A	222	39.045	41.623	3.817	1.00	9.41	A
50	ATOM	1600	N	ASN	A	223	39.810	43.618	4.520	1.00	7.78	A
	ATOM	1601	CA	ASN	A	223	38.493	44.072	4.963	1.00	8.74	A
	ATOM	1602	CB	ASN	A	223	38.245	43.690	6.428	1.00	8.42	A
	ATOM	1603	CG	ASN	A	223	38.351	42.205	6.680	1.00	9.69	A
	ATOM	1604	OD1	ASN	A	223	39.393	41.707	7.120	1.00	12.33	A
55	ATOM	1605	ND2	ASN	A	223	37.277	41.485	6.397	1.00	7.18	A
	ATOM	1606	C	ASN	A	223	38.326	45.577	4.865	1.00	8.67	A
	ATOM	1607	O	ASN	A	223	39.296	46.321	4.958	1.00	8.40	A

	ATOM	1608	N	MET	A	224	37.084	46.017	4.696	1.00	8.46	A
	ATOM	1609	CA	MET	A	224	36.789	47.440	4.639	1.00	8.92	A
	ATOM	1610	CB	MET	A	224	36.907	47.985	3.205	1.00	9.87	A
5	ATOM	1611	CG	MET	A	224	35.838	47.523	2.223	1.00	10.12	A
	ATOM	1612	SD	MET	A	224	36.006	48.350	0.600	1.00	7.76	A
	ATOM	1613	CE	MET	A	224	35.537	49.942	1.024	1.00	11.95	A
	ATOM	1614	C	MET	A	224	35.402	47.725	5.204	1.00	9.03	A
	ATOM	1615	O	MET	A	224	34.516	46.857	5.208	1.00	9.02	A
10	ATOM	1616	N	LEU	A	225	35.232	48.942	5.704	1.00	8.45	A
	ATOM	1617	CA	LEU	A	225	33.968	49.371	6.274	1.00	7.61	A
	ATOM	1618	CB	LEU	A	225	34.106	49.510	7.795	1.00	7.96	A
	ATOM	1619	CG	LEU	A	225	32.908	50.089	8.556	1.00	8.82	A
	ATOM	1620	CD1	LEU	A	225	32.890	49.535	9.972	1.00	9.70	A
	ATOM	1621	CD2	LEU	A	225	32.974	51.612	8.562	1.00	8.60	A
15	ATOM	1622	C	LEU	A	225	33.548	50.702	5.662	1.00	8.09	A
	ATOM	1623	O	LEU	A	225	34.374	51.600	5.483	1.00	7.68	A
	ATOM	1624	N	ILE	A	226	32.262	50.814	5.340	1.00	7.66	A
	ATOM	1625	CA	ILE	A	226	31.702	52.033	4.768	1.00	8.84	A
20	ATOM	1626	CB	ILE	A	226	31.376	51.846	3.266	1.00	8.66	A
	ATOM	1627	CG2	ILE	A	226	32.658	51.514	2.510	1.00	9.89	A
	ATOM	1628	CG1	ILE	A	226	30.349	50.730	3.069	1.00	8.55	A
	ATOM	1629	CD1	ILE	A	226	29.922	50.548	1.617	1.00	10.07	A
	ATOM	1630	C	ILE	A	226	30.453	52.428	5.557	1.00	8.74	A
25	ATOM	1631	O	ILE	A	226	29.889	51.610	6.291	1.00	8.14	A
	ATOM	1632	N	GLN	A	227	30.021	53.676	5.412	1.00	9.54	A
	ATOM	1633	CA	GLN	A	227	28.873	54.172	6.168	1.00	9.75	A
	ATOM	1634	CB	GLN	A	227	29.391	54.976	7.372	1.00	9.88	A
	ATOM	1635	CG	GLN	A	227	28.464	56.067	7.921	1.00	11.96	A
	ATOM	1636	CD	GLN	A	227	27.124	55.547	8.407	1.00	12.75	A
30	ATOM	1637	OE1	GLN	A	227	27.004	54.398	8.836	1.00	14.70	A
	ATOM	1638	NE2	GLN	A	227	26.108	56.404	8.362	1.00	13.56	A
	ATOM	1639	C	GLN	A	227	27.846	55.006	5.405	1.00	10.51	A
	ATOM	1640	O	GLN	A	227	26.645	54.738	5.481	1.00	10.20	A
35	ATOM	1641	N	ARG	A	228	28.299	56.021	4.679	1.00	10.04	A
	ATOM	1642	CA	ARG	A	228	27.355	56.876	3.982	1.00	9.98	A
	ATOM	1643	CB	ARG	A	228	27.947	58.273	3.781	1.00	9.92	A
	ATOM	1644	CG	ARG	A	228	28.069	59.090	5.065	1.00	10.20	A
	ATOM	1645	CD	ARG	A	228	28.533	60.505	4.744	1.00	10.13	A
	ATOM	1646	NE	ARG	A	228	28.804	61.332	5.918	1.00	10.21	A
40	ATOM	1647	CZ	ARG	A	228	27.894	62.037	6.585	1.00	11.44	A
	ATOM	1648	NH1	ARG	A	228	26.622	62.022	6.208	1.00	12.48	A
	ATOM	1649	NH2	ARG	A	228	28.268	62.786	7.616	1.00	12.71	A
	ATOM	1650	C	ARG	A	228	26.817	56.352	2.666	1.00	10.13	A
45	ATOM	1651	O	ARG	A	228	27.382	56.593	1.597	1.00	11.44	A
	ATOM	1652	N	THR	A	229	25.714	55.621	2.770	1.00	9.97	A
	ATOM	1653	CA	THR	A	229	25.025	55.072	1.617	1.00	9.89	A
	ATOM	1654	CB	THR	A	229	25.125	53.531	1.560	1.00	10.00	A
	ATOM	1655	OG1	THR	A	229	24.514	52.964	2.724	1.00	10.96	A
50	ATOM	1656	CG2	THR	A	229	26.583	53.096	1.493	1.00	10.02	A
	ATOM	1657	C	THR	A	229	23.569	55.490	1.778	1.00	9.89	A
	ATOM	1658	O	THR	A	229	23.106	55.742	2.894	1.00	11.00	A
	ATOM	1659	N	HIS	A	230	22.856	55.573	0.661	1.00	9.52	A
	ATOM	1660	CA	HIS	A	230	21.450	55.979	0.642	1.00	9.76	A
	ATOM	1661	CB	HIS	A	230	20.883	55.708	-0.754	1.00	10.27	A
55	ATOM	1662	CG	HIS	A	230	19.595	56.415	-1.043	1.00	10.51	A

5	ATOM	1663	CD2	HIS	A	230	19.286	57.353	-1.969	1.00	11.88	A
	ATOM	1664	ND1	HIS	A	230	18.427	56.153	-0.359	1.00	11.10	A
	ATOM	1665	CE1	HIS	A	230	17.454	56.899	-0.852	1.00	11.36	A
	ATOM	1666	NE2	HIS	A	230	17.949	57.636	-1.830	1.00	11.11	A
	ATOM	1667	C	HIS	A	230	20.637	55.234	1.704	1.00	9.83	A
	ATOM	1668	O	HIS	A	230	20.735	54.018	1.826	1.00	10.51	A
	ATOM	1669	N	TYR	A	231	19.827	55.963	2.466	1.00	10.15	A
	ATOM	1670	CA	TYR	A	231	19.030	55.327	3.511	1.00	10.13	A
10	ATOM	1671	CB	TYR	A	231	18.178	56.372	4.246	1.00	10.68	A
	ATOM	1672	CG	TYR	A	231	17.197	57.136	3.381	1.00	11.51	A
	ATOM	1673	CD1	TYR	A	231	15.910	56.648	3.151	1.00	10.48	A
	ATOM	1674	CE1	TYR	A	231	14.997	57.361	2.372	1.00	11.82	A
15	ATOM	1675	CD2	TYR	A	231	17.552	58.359	2.805	1.00	11.23	A
	ATOM	1676	CE2	TYR	A	231	16.649	59.079	2.022	1.00	11.82	A
	ATOM	1677	CZ	TYR	A	231	15.373	58.573	1.813	1.00	11.99	A
	ATOM	1678	OH	TYR	A	231	14.470	59.278	1.054	1.00	12.91	A
	ATOM	1679	C	TYR	A	231	18.155	54.188	2.984	1.00	11.22	A
20	ATOM	1680	O	TYR	A	231	17.897	53.220	3.699	1.00	12.09	A
	ATOM	1681	N	SER	A	232	17.710	54.288	1.736	1.00	10.94	A
	ATOM	1682	CA	SER	A	232	16.876	53.238	1.155	1.00	11.93	A
	ATOM	1683	CB	SER	A	232	16.257	53.708	-0.163	1.00	12.92	A
	ATOM	1684	OG	SER	A	232	15.307	54.731	0.063	1.00	15.26	A
	ATOM	1685	C	SER	A	232	17.692	51.976	0.915	1.00	11.85	A
25	ATOM	1686	O	SER	A	232	17.176	50.861	1.025	1.00	11.64	A
	ATOM	1687	N	VAL	A	233	18.967	52.158	0.580	1.00	11.60	A
	ATOM	1688	CA	VAL	A	233	19.868	51.038	0.336	1.00	11.31	A
	ATOM	1689	CB	VAL	A	233	21.197	51.527	-0.295	1.00	10.85	A
30	ATOM	1690	CG1	VAL	A	233	22.222	50.406	-0.300	1.00	10.34	A
	ATOM	1691	CG2	VAL	A	233	20.945	51.999	-1.724	1.00	11.98	A
	ATOM	1692	C	VAL	A	233	20.152	50.315	1.653	1.00	11.28	A
	ATOM	1693	O	VAL	A	233	20.166	49.085	1.706	1.00	11.15	A
	ATOM	1694	N	LYS	A	234	20.379	51.080	2.716	1.00	10.86	A
35	ATOM	1695	CA	LYS	A	234	20.632	50.477	4.020	1.00	10.69	A
	ATOM	1696	CB	LYS	A	234	20.862	51.563	5.075	1.00	10.64	A
	ATOM	1697	CG	LYS	A	234	22.199	52.286	4.946	1.00	11.25	A
	ATOM	1698	CD	LYS	A	234	22.250	53.516	5.841	1.00	11.31	A
	ATOM	1699	CE	LYS	A	234	23.624	54.189	5.810	1.00	10.54	A
	ATOM	1700	NZ	LYS	A	234	24.597	53.574	6.772	1.00	10.11	A
40	ATOM	1701	C	LYS	A	234	19.443	49.609	4.424	1.00	11.48	A
	ATOM	1702	O	LYS	A	234	19.619	48.484	4.884	1.00	11.20	A
	ATOM	1703	N	LYS	A	235	18.236	50.135	4.238	1.00	11.59	A
	ATOM	1704	CA	LYS	A	235	17.024	49.400	4.595	1.00	12.69	A
45	ATOM	1705	CB	LYS	A	235	15.789	50.286	4.401	1.00	13.05	A
	ATOM	1706	CG	LYS	A	235	14.479	49.630	4.827	1.00	13.80	A
	ATOM	1707	CD	LYS	A	235	13.312	50.593	4.692	1.00	14.78	A
	ATOM	1708	CE	LYS	A	235	12.016	49.963	5.174	1.00	16.08	A
	ATOM	1709	NZ	LYS	A	235	10.853	50.872	4.963	1.00	18.03	A
50	ATOM	1710	C	LYS	A	235	16.878	48.122	3.775	1.00	12.66	A
	ATOM	1711	O	LYS	A	235	16.596	47.056	4.322	1.00	13.44	A
	ATOM	1712	N	GLU	A	236	17.084	48.230	2.467	1.00	13.43	A
	ATOM	1713	CA	GLU	A	236	16.962	47.085	1.572	1.00	13.76	A
	ATOM	1714	CB	GLU	A	236	17.160	47.531	0.119	1.00	15.66	A
	ATOM	1715	CG	GLU	A	236	16.930	46.435	-0.919	1.00	19.35	A
55	ATOM	1716	CD	GLU	A	236	15.454	46.120	-1.139	1.00	21.36	A
	ATOM	1717	OE1	GLU	A	236	15.157	45.192	-1.921	1.00	23.68	A

5	ATOM	1718	OE2	GLU	A	236	14.594	46.799	-0.539	1.00	23.54	A
	ATOM	1719	C	GLU	A	236	17.963	45.983	1.908	1.00	13.53	A
	ATOM	1720	O	GLU	A	236	17.596	44.817	2.035	1.00	13.84	A
	ATOM	1721	N	LEU	A	237	19.232	46.346	2.051	1.00	12.28	A
	ATOM	1722	CA	LEU	A	237	20.251	45.355	2.364	1.00	11.83	A
10	ATOM	1723	CB	LEU	A	237	21.649	45.952	2.180	1.00	11.01	A
	ATOM	1724	CG	LEU	A	237	21.993	46.436	0.767	1.00	12.53	A
	ATOM	1725	CD1	LEU	A	237	23.396	47.036	0.776	1.00	13.20	A
	ATOM	1726	CD2	LEU	A	237	21.905	45.280	-0.227	1.00	12.87	A
	ATOM	1727	C	LEU	A	237	20.094	44.808	3.781	1.00	11.90	A
15	ATOM	1728	O	LEU	A	237	20.376	43.640	4.032	1.00	12.05	A
	ATOM	1729	N	ALA	A	238	19.641	45.647	4.706	1.00	12.02	A
	ATOM	1730	CA	ALA	A	238	19.456	45.205	6.084	1.00	12.54	A
	ATOM	1731	CB	ALA	A	238	19.050	46.380	6.962	1.00	12.67	A
	ATOM	1732	C	ALA	A	238	18.389	44.115	6.146	1.00	13.90	A
20	ATOM	1733	O	ALA	A	238	18.547	43.120	6.853	1.00	13.71	A
	ATOM	1734	N	GLN	A	239	17.309	44.304	5.396	1.00	14.65	A
	ATOM	1735	CA	GLN	A	239	16.216	43.335	5.391	1.00	16.12	A
	ATOM	1736	CB	GLN	A	239	15.050	43.858	4.544	1.00	17.16	A
	ATOM	1737	CG	GLN	A	239	14.476	45.180	5.040	1.00	20.68	A
25	ATOM	1738	CD	GLN	A	239	13.320	45.684	4.193	1.00	21.84	A
	ATOM	1739	OE1	GLN	A	239	13.385	45.678	2.962	1.00	24.34	A
	ATOM	1740	NE2	GLN	A	239	12.258	46.139	4.852	1.00	23.09	A
	ATOM	1741	C	GLN	A	239	16.649	41.959	4.888	1.00	16.39	A
	ATOM	1742	O	GLN	A	239	16.067	40.944	5.267	1.00	16.74	A
30	ATOM	1743	N	GLN	A	240	17.673	41.923	4.042	1.00	15.26	A
	ATOM	1744	CA	GLN	A	240	18.164	40.661	3.493	1.00	15.33	A
	ATOM	1745	CB	GLN	A	240	18.389	40.803	1.986	1.00	17.66	A
	ATOM	1746	CG	GLN	A	240	17.204	41.396	1.241	1.00	20.48	A
	ATOM	1747	CD	GLN	A	240	15.975	40.514	1.292	1.00	22.28	A
35	ATOM	1748	OE1	GLN	A	240	14.857	40.979	1.065	1.00	25.19	A
	ATOM	1749	NE2	GLN	A	240	16.173	39.232	1.579	1.00	23.21	A
	ATOM	1750	C	GLN	A	240	19.471	40.250	4.155	1.00	14.44	A
	ATOM	1751	O	GLN	A	240	20.100	39.274	3.748	1.00	13.55	A
	ATOM	1752	N	ARG	A	241	19.863	40.991	5.187	1.00	13.13	A
40	ATOM	1753	CA	ARG	A	241	21.115	40.740	5.889	1.00	12.19	A
	ATOM	1754	CB	ARG	A	241	21.053	39.430	6.684	1.00	13.02	A
	ATOM	1755	CG	ARG	A	241	20.025	39.457	7.810	1.00	15.06	A
	ATOM	1756	CD	ARG	A	241	20.249	38.323	8.798	1.00	16.85	A
	ATOM	1757	NE	ARG	A	241	20.265	37.021	8.141	1.00	19.77	A
45	ATOM	1758	CZ	ARG	A	241	20.649	35.894	8.732	1.00	20.67	A
	ATOM	1759	NH1	ARG	A	241	21.049	35.910	9.997	1.00	21.43	A
	ATOM	1760	NH2	ARG	A	241	20.641	34.754	8.056	1.00	21.54	A
	ATOM	1761	C	ARG	A	241	22.254	40.694	4.876	1.00	11.37	A
	ATOM	1762	O	ARG	A	241	23.069	39.774	4.863	1.00	10.26	A
50	ATOM	1763	N	GLN	A	242	22.290	41.706	4.016	1.00	11.13	A
	ATOM	1764	CA	GLN	A	242	23.323	41.811	2.995	1.00	10.98	A
	ATOM	1765	CB	GLN	A	242	22.682	41.863	1.602	1.00	11.23	A
	ATOM	1766	CG	GLN	A	242	21.894	40.607	1.237	1.00	11.67	A
	ATOM	1767	CD	GLN	A	242	21.187	40.729	-0.098	1.00	11.70	A
55	ATOM	1768	OE1	GLN	A	242	20.617	41.770	-0.412	1.00	13.37	A
	ATOM	1769	NE2	GLN	A	242	21.208	39.656	-0.884	1.00	12.95	A
	ATOM	1770	C	GLN	A	242	24.178	43.055	3.233	1.00	10.67	A
	ATOM	1771	O	GLN	A	242	24.695	43.651	2.289	1.00	10.60	A
	ATOM	1772	N	LEU	A	243	24.322	43.440	4.500	1.00	10.44	A

5	ATOM	1773	CA	LEU	A	243	25.128	44.606	4.852	1.00	9.93	A
	ATOM	1774	CB	LEU	A	243	24.704	45.154	6.216	1.00	10.62	A
	ATOM	1775	CG	LEU	A	243	23.328	45.826	6.244	1.00	11.00	A
	ATOM	1776	CD1	LEU	A	243	22.896	46.028	7.688	1.00	11.97	A
	ATOM	1777	CD2	LEU	A	243	23.370	47.158	5.490	1.00	11.86	A
10	ATOM	1778	C	LEU	A	243	26.613	44.260	4.853	1.00	10.25	A
	ATOM	1779	O	LEU	A	243	27.465	45.144	4.827	1.00	10.36	A
	ATOM	1780	N	GLU	A	244	26.922	42.969	4.911	1.00	9.67	A
	ATOM	1781	CA	GLU	A	244	28.306	42.519	4.841	1.00	8.98	A
	ATOM	1782	CB	GLU	A	244	28.693	41.695	6.073	1.00	9.51	A
15	ATOM	1783	CG	GLU	A	244	28.875	42.595	7.291	1.00	10.20	A
	ATOM	1784	CD	GLU	A	244	29.326	41.864	8.538	1.00	10.87	A
	ATOM	1785	OE1	GLU	A	244	28.790	40.773	8.818	1.00	11.28	A
	ATOM	1786	OE2	GLU	A	244	30.207	42.402	9.249	1.00	10.96	A
	ATOM	1787	C	GLU	A	244	28.339	41.703	3.569	1.00	9.24	A
20	ATOM	1788	O	GLU	A	244	27.536	40.788	3.386	1.00	10.29	A
	ATOM	1789	N	PHE	A	245	29.260	42.053	2.680	1.00	8.67	A
	ATOM	1790	CA	PHE	A	245	29.337	41.396	1.389	1.00	8.89	A
	ATOM	1791	CB	PHE	A	245	28.379	42.114	0.431	1.00	8.55	A
	ATOM	1792	CG	PHE	A	245	28.521	43.615	0.444	1.00	8.85	A
25	ATOM	1793	CD1	PHE	A	245	29.493	44.250	-0.327	1.00	8.41	A
	ATOM	1794	CD2	PHE	A	245	27.689	44.392	1.245	1.00	8.58	A
	ATOM	1795	CE1	PHE	A	245	29.631	45.646	-0.300	1.00	8.68	A
	ATOM	1796	CE2	PHE	A	245	27.817	45.782	1.283	1.00	8.53	A
	ATOM	1797	CZ	PHE	A	245	28.790	46.409	0.509	1.00	8.54	A
30	ATOM	1798	C	PHE	A	245	30.730	41.382	0.793	1.00	8.60	A
	ATOM	1799	O	PHE	A	245	31.619	42.115	1.235	1.00	8.82	A
	ATOM	1800	N	LEU	A	246	30.917	40.532	-0.212	1.00	8.87	A
	ATOM	1801	CA	LEU	A	246	32.187	40.446	-0.913	1.00	8.06	A
	ATOM	1802	CB	LEU	A	246	32.466	39.001	-1.333	1.00	9.53	A
35	ATOM	1803	CG	LEU	A	246	32.800	38.076	-0.154	1.00	11.53	A
	ATOM	1804	CD1	LEU	A	246	32.772	36.626	-0.602	1.00	13.79	A
	ATOM	1805	CD2	LEU	A	246	34.166	38.447	0.402	1.00	13.15	A
	ATOM	1806	C	LEU	A	246	32.033	41.364	-2.120	1.00	8.24	A
	ATOM	1807	O	LEU	A	246	31.392	41.019	-3.115	1.00	8.61	A
40	ATOM	1808	N	TRP	A	247	32.611	42.552	-2.002	1.00	7.63	A
	ATOM	1809	CA	TRP	A	247	32.522	43.574	-3.037	1.00	7.37	A
	ATOM	1810	CB	TRP	A	247	32.718	44.947	-2.388	1.00	7.55	A
	ATOM	1811	CG	TRP	A	247	32.238	46.118	-3.199	1.00	7.27	A
	ATOM	1812	CD2	TRP	A	247	32.240	47.492	-2.791	1.00	7.02	A
45	ATOM	1813	CE2	TRP	A	247	31.685	48.247	-3.850	1.00	7.18	A
	ATOM	1814	CE3	TRP	A	247	32.659	48.160	-1.631	1.00	7.47	A
	ATOM	1815	CD1	TRP	A	247	31.699	46.093	-4.455	1.00	7.86	A
	ATOM	1816	NE1	TRP	A	247	31.363	47.371	-4.853	1.00	7.55	A
	ATOM	1817	CZ2	TRP	A	247	31.538	49.638	-3.784	1.00	8.05	A
50	ATOM	1818	CZ3	TRP	A	247	32.514	49.542	-1.565	1.00	6.90	A
	ATOM	1819	CH2	TRP	A	247	31.958	50.267	-2.636	1.00	7.34	A
	ATOM	1820	C	TRP	A	247	33.546	43.372	-4.145	1.00	7.92	A
	ATOM	1821	O	TRP	A	247	34.749	43.559	-3.939	1.00	8.05	A
	ATOM	1822	N	ARG	A	248	33.062	42.993	-5.326	1.00	7.42	A
55	ATOM	1823	CA	ARG	A	248	33.932	42.786	-6.477	1.00	7.87	A
	ATOM	1824	CB	ARG	A	248	33.690	41.415	-7.109	1.00	8.53	A
	ATOM	1825	CG	ARG	A	248	32.327	41.277	-7.775	1.00	8.64	A
	ATOM	1826	CD	ARG	A	248	32.236	39.987	-8.581	1.00	10.45	A
	ATOM	1827	NE	ARG	A	248	32.326	38.807	-7.727	1.00	11.08	A

5	ATOM	1828	CZ	ARG	A	248	32.317	37.558	-8.185	1.00	12.28	A
	ATOM	1829	NH1	ARG	A	248	32.228	37.330	-9.488	1.00	13.21	A
	ATOM	1830	NH2	ARG	A	248	32.382	36.537	-7.339	1.00	12.78	A
	ATOM	1831	C	ARG	A	248	33.645	43.856	-7.521	1.00	7.64	A
	ATOM	1832	O	ARG	A	248	32.605	44.515	-7.474	1.00	7.91	A
10	ATOM	1833	N	GLN	A	249	34.560	44.010	-8.472	1.00	7.42	A
	ATOM	1834	CA	GLN	A	249	34.389	44.994	-9.531	1.00	7.77	A
	ATOM	1835	CB	GLN	A	249	35.713	45.188	-10.272	1.00	8.10	A
	ATOM	1836	CG	GLN	A	249	36.832	45.675	-9.353	1.00	8.22	A
	ATOM	1837	CD	GLN	A	249	36.448	46.940	-8.598	1.00	8.40	A
15	ATOM	1838	OE1	GLN	A	249	36.432	46.970	-7.358	1.00	10.28	A
	ATOM	1839	NE2	GLN	A	249	36.136	47.993	-9.341	1.00	7.14	A
	ATOM	1840	C	GLN	A	249	33.280	44.546	-10.480	1.00	8.70	A
	ATOM	1841	O	GLN	A	249	33.042	43.349	-10.654	1.00	9.20	A
	ATOM	1842	N	ILE	A	250	32.600	45.511	-11.093	1.00	9.12	A
20	ATOM	1843	CA	ILE	A	250	31.480	45.200	-11.979	1.00	9.19	A
	ATOM	1844	CB	ILE	A	250	30.791	46.503	-12.492	1.00	9.85	A
	ATOM	1845	CG2	ILE	A	250	30.175	47.259	-11.313	1.00	10.38	A
	ATOM	1846	CG1	ILE	A	250	31.797	47.390	-13.227	1.00	11.20	A
	ATOM	1847	CD1	ILE	A	250	31.197	48.698	-13.725	1.00	11.47	A
25	ATOM	1848	C	ILE	A	250	31.780	44.286	-13.169	1.00	10.02	A
	ATOM	1849	O	ILE	A	250	30.878	43.622	-13.675	1.00	10.72	A
	ATOM	1850	N	TRP	A	251	33.037	44.231	-13.594	1.00	10.74	A
	ATOM	1851	CA	TRP	A	251	33.428	43.399	-14.736	1.00	12.59	A
	ATOM	1852	CB	TRP	A	251	34.414	44.165	-15.611	1.00	12.54	A
30	ATOM	1853	CG	TRP	A	251	35.724	44.337	-14.919	1.00	14.60	A
	ATOM	1854	CD2	TRP	A	251	36.151	45.478	-14.175	1.00	14.42	A
	ATOM	1855	CE2	TRP	A	251	37.400	45.159	-13.599	1.00	15.03	A
	ATOM	1856	CE3	TRP	A	251	35.597	46.742	-13.934	1.00	14.69	A
	ATOM	1857	CD1	TRP	A	251	36.708	43.397	-14.775	1.00	15.34	A
35	ATOM	1858	NE1	TRP	A	251	37.715	43.882	-13.982	1.00	15.12	A
	ATOM	1859	CZ2	TRP	A	251	38.107	46.058	-12.795	1.00	15.07	A
	ATOM	1860	CZ3	TRP	A	251	36.299	47.636	-13.136	1.00	15.29	A
	ATOM	1861	CH2	TRP	A	251	37.541	47.288	-12.577	1.00	15.76	A
	ATOM	1862	C	TRP	A	251	34.096	42.089	-14.328	1.00	13.99	A
40	ATOM	1863	O	TRP	A	251	34.429	41.268	-15.182	1.00	13.91	A
	ATOM	1864	N	ASP	A	252	34.301	41.903	-13.030	1.00	13.53	A
	ATOM	1865	CA	ASP	A	252	34.982	40.719	-12.509	1.00	14.68	A
	ATOM	1866	CB	ASP	A	252	35.582	41.062	-11.142	1.00	13.69	A
	ATOM	1867	CG	ASP	A	252	36.337	39.907	-10.523	1.00	15.31	A
45	ATOM	1868	OD1	ASP	A	252	36.637	38.929	-11.241	1.00	16.51	A
	ATOM	1869	OD2	ASP	A	252	36.637	39.988	-9.313	1.00	15.02	A
	ATCM	1870	C	ASP	A	252	34.111	39.469	-12.413	1.00	15.48	A
	ATOM	1871	O	ASP	A	252	33.357	39.291	-11.459	1.00	15.34	A
	ATOM	1872	N	ASN	A	253	34.239	38.587	-13.398	1.00	16.95	A
50	ATOM	1873	CA	ASN	A	253	33.440	37.371	-13.420	1.00	18.55	A
	ATOM	1874	CB	ASN	A	253	33.378	36.815	-14.844	1.00	20.21	A
	ATOM	1875	CG	ASN	A	253	32.069	36.113	-15.132	1.00	22.48	A
	ATOM	1876	OD1	ASN	A	253	31.805	35.031	-14.615	1.00	24.09	A
	ATOM	1877	ND2	ASN	A	253	31.231	36.740	-15.950	1.00	23.35	A
55	ATOM	1878	C	ASN	A	253	33.948	36.293	-12.466	1.00	18.73	A
	ATOM	1879	O	ASN	A	253	33.158	35.532	-11.911	1.00	19.87	A
	ATOM	1880	N	LYS	A	254	35.261	36.235	-12.269	1.00	19.53	A
	ATOM	1881	CA	LYS	A	254	35.850	35.229	-11.388	1.00	20.76	A
	ATOM	1882	CB	LYS	A	254	37.322	35.010	-11.751	1.00	23.00	A

5	ATOM	1883	CG	LYS	A	254	37.954	33.785	-11.101	1.00	25.67	A
	ATOM	1884	CD	LYS	A	254	39.370	33.561	-11.616	1.00	27.42	A
	ATOM	1885	CE	LYS	A	254	39.961	32.259	-11.089	1.00	28.32	A
	ATOM	1886	NZ	LYS	A	254	40.034	32.228	-9.602	1.00	28.78	A
	ATOM	1887	C	LYS	A	254	35.730	35.616	-9.916	1.00	20.23	A
10	ATOM	1888	O	LYS	A	254	35.481	34.762	-9.061	1.00	20.70	A
	ATOM	1889	N	GLY	A	255	35.914	36.901	-9.624	1.00	19.06	A
	ATOM	1890	CA	GLY	A	255	35.811	37.372	-8.253	1.00	17.83	A
	ATOM	1891	C	GLY	A	255	37.130	37.609	-7.534	1.00	17.06	A
	ATOM	1892	O	GLY	A	255	37.140	37.810	-6.320	1.00	16.43	A
15	ATOM	1893	N	ASP	A	256	38.239	37.608	-8.268	1.00	16.71	A
	ATOM	1894	CA	ASP	A	256	39.548	37.818	-7.652	1.00	17.09	A
	ATOM	1895	CB	ASP	A	256	40.670	37.546	-8.658	1.00	20.30	A
	ATOM	1896	CG	ASP	A	256	40.680	36.113	-9.147	1.00	22.97	A
	ATOM	1897	OD1	ASP	A	256	40.535	35.196	-8.309	1.00	25.34	A
20	ATOM	1898	OD2	ASP	A	256	40.844	35.904	-10.368	1.00	25.26	A
	ATOM	1899	C	ASP	A	256	39.738	39.212	-7.059	1.00	15.66	A
	ATOM	1900	O	ASP	A	256	40.640	39.426	-6.253	1.00	15.19	A
	ATOM	1901	N	THR	A	257	38.900	40.163	-7.457	1.00	13.06	A
	ATOM	1902	CA	THR	A	257	39.010	41.523	-6.926	1.00	12.42	A
25	ATOM	1903	CB	THR	A	257	38.501	42.579	-7.926	1.00	12.11	A
	ATOM	1904	OG1	THR	A	257	37.112	42.348	-8.194	1.00	11.97	A
	ATOM	1905	CG2	THR	A	257	39.303	42.528	-9.218	1.00	12.56	A
	ATOM	1906	C	THR	A	257	38.204	41.716	-5.644	1.00	12.57	A
	ATOM	1907	O	THR	A	257	38.301	42.759	-5.000	1.00	13.02	A
30	ATOM	1908	N	ALA	A	258	37.420	40.707	-5.277	1.00	11.47	A
	ATOM	1909	CA	ALA	A	258	36.568	40.785	-4.096	1.00	10.47	A
	ATOM	1910	CB	ALA	A	258	35.819	39.475	-3.907	1.00	11.26	A
	ATOM	1911	C	ALA	A	258	37.262	41.162	-2.794	1.00	10.09	A
	ATOM	1912	O	ALA	A	258	38.349	40.675	-2.481	1.00	11.10	A
35	ATOM	1913	N	LEU	A	259	36.608	42.038	-2.041	1.00	9.25	A
	ATOM	1914	CA	LEU	A	259	37.106	42.486	-0.747	1.00	9.11	A
	ATOM	1915	CB	LEU	A	259	37.709	43.889	-0.846	1.00	8.75	A
	ATOM	1916	CG	LEU	A	259	38.434	44.373	0.416	1.00	8.50	A
	ATOM	1917	CD1	LEU	A	259	39.634	43.466	0.702	1.00	9.84	A
40	ATOM	1918	CD2	LEU	A	259	38.890	45.818	0.226	1.00	10.21	A
	ATOM	1919	C	LEU	A	259	35.923	42.506	0.211	1.00	8.64	A
	ATOM	1920	O	LEU	A	259	34.890	43.119	-0.074	1.00	8.01	A
	ATOM	1921	N	PHE	A	260	36.068	41.829	1.347	1.00	8.58	A
	ATOM	1922	CA	PHE	A	260	34.997	41.785	2.333	1.00	8.58	A
45	ATOM	1923	CB	PHE	A	260	35.405	40.932	3.533	1.00	8.62	A
	ATOM	1924	CG	PHE	A	260	34.301	40.738	4.529	1.00	9.48	A
	ATOM	1925	CD1	PHE	A	260	33.310	39.786	4.310	1.00	11.03	A
	ATOM	1926	CD2	PHE	A	260	34.233	41.523	5.670	1.00	9.44	A
	ATOM	1927	CE1	PHE	A	260	32.269	39.619	5.217	1.00	10.46	A
50	ATOM	1928	CE2	PHE	A	260	33.194	41.366	6.587	1.00	10.60	A
	ATOM	1929	CZ	PHE	A	260	32.210	40.413	6.358	1.00	10.54	A
	ATOM	1930	C	PHE	A	260	34.669	43.198	2.800	1.00	7.96	A
	ATOM	1931	O	PHE	A	260	35.548	43.943	3.240	1.00	8.25	A
	ATOM	1932	N	THR	A	261	33.393	43.555	2.723	1.00	7.64	A
55	ATOM	1933	CA	THR	A	261	32.951	44.887	3.098	1.00	7.65	A
	ATOM	1934	CB	THR	A	261	32.467	45.656	1.849	1.00	8.01	A
	ATOM	1935	OG1	THR	A	261	33.522	45.707	0.881	1.00	8.64	A
	ATOM	1936	CG2	THR	A	261	32.039	47.064	2.212	1.00	8.16	A
	ATOM	1937	C	THR	A	261	31.817	44.875	4.111	1.00	7.68	A

5	ATOM	1938	O	THR	A	261	30.870	44.096	3.992	1.00	8.41	A
	ATOM	1939	N	HIS	A	262	31.922	45.758	5.100	1.00	6.93	A
	ATOM	1940	CA	HIS	A	262	30.901	45.912	6.123	1.00	7.90	A
	ATOM	1941	CB	HIS	A	262	31.519	45.801	7.522	1.00	8.17	A
	ATOM	1942	CG	HIS	A	262	30.578	46.163	8.632	1.00	8.05	A
10	ATOM	1943	CD2	HIS	A	262	30.160	47.368	9.091	1.00	8.34	A
	ATOM	1944	ND1	HIS	A	262	29.948	45.218	9.414	1.00	8.69	A
	ATOM	1945	CE1	HIS	A	262	29.185	45.825	10.308	1.00	8.74	A
	ATOM	1946	NE2	HIS	A	262	29.296	47.130	10.134	1.00	9.13	A
	ATOM	1947	C	HIS	A	262	30.274	47.293	5.964	1.00	8.58	A
15	ATOM	1948	O	HIS	A	262	30.973	48.307	6.012	1.00	8.10	A
	ATOM	1949	N	MSE	A	263	28.965	47.333	5.747	1.00	8.26	A
	ATOM	1950	CA	MSE	A	263	28.257	48.600	5.633	1.00	9.29	A
	ATOM	1951	CB	MSE	A	263	27.263	48.572	4.469	1.00	10.58	A
	ATOM	1952	CG	MSE	A	263	26.474	49.869	4.305	1.00	10.98	A
20	ATOM	1953	SE	MSE	A	263	24.989	49.720	3.067	1.00	16.18	A
	ATOM	1954	CE	MSE	A	263	25.986	49.431	1.449	1.00	13.27	A
	ATOM	1955	C	MSE	A	263	27.493	48.822	6.935	1.00	9.90	A
	ATOM	1956	O	MSE	A	263	26.734	47.949	7.372	1.00	10.15	A
	ATOM	1957	N	MSE	A	264	27.709	49.973	7.567	1.00	9.48	A
25	ATOM	1958	CA	MSE	A	264	27.000	50.294	8.800	1.00	11.38	A
	ATOM	1959	CB	MSE	A	264	27.599	51.544	9.434	1.00	13.97	A
	ATOM	1960	CG	MSE	A	264	28.998	51.276	9.969	1.00	18.24	A
	ATOM	1961	SE	MSE	A	264	29.922	52.842	10.605	1.00	30.43	A
	ATOM	1962	CE	MSE	A	264	28.649	53.434	11.918	1.00	25.37	A
30	ATOM	1963	C	MSE	A	264	25.544	50.473	8.391	1.00	10.63	A
	ATOM	1964	O	MSE	A	264	25.254	50.951	7.296	1.00	10.87	A
	ATOM	1965	N	PRO	A	265	24.605	50.109	9.274	1.00	10.69	A
	ATOM	1966	CD	PRO	A	265	24.819	49.543	10.620	1.00	10.66	A
	ATOM	1967	CA	PRO	A	265	23.177	50.203	8.973	1.00	11.01	A
35	ATOM	1968	CB	PRO	A	265	22.610	49.052	9.785	1.00	10.51	A
	ATOM	1969	CG	PRO	A	265	23.392	49.183	11.069	1.00	10.95	A
	ATOM	1970	C	PRO	A	265	22.390	51.468	9.232	1.00	11.27	A
	ATOM	1971	O	PRO	A	265	21.302	51.635	8.681	1.00	11.33	A
	ATOM	1972	N	PHE	A	266	22.929	52.361	10.048	1.00	11.35	A
40	ATOM	1973	CA	PHE	A	266	22.177	53.540	10.421	1.00	11.37	A
	ATOM	1974	CB	PHE	A	266	22.134	53.589	11.952	1.00	10.85	A
	ATOM	1975	CG	PHE	A	266	21.602	52.310	12.573	1.00	10.84	A
	ATOM	1976	CD1	PHE	A	266	22.225	51.740	13.679	1.00	10.84	A
	ATOM	1977	CD2	PHE	A	266	20.487	51.669	12.031	1.00	11.07	A
45	ATOM	1978	CE1	PHE	A	266	21.748	50.551	14.236	1.00	10.63	A
	ATOM	1979	CE2	PHE	A	266	20.001	50.481	12.580	1.00	10.14	A
	ATOM	1980	CZ	PHE	A	266	20.633	49.921	13.682	1.00	9.88	A
	ATOM	1981	C	PHE	A	266	22.564	54.885	9.812	1.00	11.36	A
	ATOM	1982	O	PHE	A	266	23.495	54.988	9.017	1.00	11.87	A
50	ATOM	1983	N	TYR	A	267	21.812	55.907	10.203	1.00	11.40	A
	ATOM	1984	CA	TYR	A	267	21.949	57.273	9.709	1.00	11.71	A
	ATOM	1985	CB	TYR	A	267	20.814	58.099	10.319	1.00	12.66	A
	ATOM	1986	CG	TYR	A	267	20.908	59.594	10.143	1.00	12.67	A
	ATOM	1987	CD1	TYR	A	267	20.575	60.204	8.934	1.00	13.51	A
55	ATOM	1988	CE1	TYR	A	267	20.613	61.597	8.798	1.00	14.20	A
	ATOM	1989	CD2	TYR	A	267	21.288	60.406	11.211	1.00	13.73	A
	ATOM	1990	CE2	TYR	A	267	21.330	61.786	11.085	1.00	14.05	A
	ATOM	1991	CZ	TYR	A	267	20.990	62.376	9.882	1.00	15.05	A
	ATOM	1992	OH	TYR	A	267	21.017	63.747	9.784	1.00	16.91	A

5	ATOM	1993	C	TYR	A	267	23.284	57.987	9.916	1.00	11.75	A
	ATOM	1994	O	TYR	A	267	23.685	58.807	9.085	1.00	11.62	A
	ATOM	1995	N	SER	A	268	23.973	57.684	11.008	1.00	11.53	A
	ATOM	1996	CA	SER	A	268	25.240	58.346	11.299	1.00	10.96	A
	ATOM	1997	CB	SER	A	268	24.975	59.572	12.178	1.00	11.47	A
10	ATOM	1998	OG	SER	A	268	26.180	60.184	12.600	1.00	13.03	A
	ATOM	1999	C	SER	A	268	26.236	57.432	11.992	1.00	10.90	A
	ATOM	2000	O	SER	A	268	25.891	56.329	12.417	1.00	10.38	A
	ATOM	2001	N	TYR	A	269	27.480	57.892	12.094	1.00	10.75	A
	ATOM	2002	CA	TYR	A	269	28.514	57.127	12.775	1.00	10.42	A
15	ATOM	2003	CB	TYR	A	269	29.872	57.282	12.069	1.00	10.68	A
	ATOM	2004	CG	TYR	A	269	30.306	58.714	11.844	1.00	10.71	A
	ATOM	2005	CD1	TYR	A	269	30.698	59.529	12.909	1.00	10.21	A
	ATOM	2006	CE1	TYR	A	269	31.055	60.864	12.702	1.00	11.28	A
	ATOM	2007	CD2	TYR	A	269	30.288	59.265	10.565	1.00	10.99	A
20	ATOM	2008	CE2	TYR	A	269	30.642	60.595	10.348	1.00	10.95	A
	ATOM	2009	CZ	TYR	A	269	31.020	61.387	11.420	1.00	11.31	A
	ATOM	2010	OH	TYR	A	269	31.331	62.711	11.209	1.00	11.28	A
	ATOM	2011	C	TYR	A	269	28.627	57.587	14.227	1.00	10.96	A
	ATOM	2012	O	TYR	A	269	29.444	57.060	14.981	1.00	10.70	A
25	ATOM	2013	N	ASP	A	270	27.816	58.570	14.625	1.00	10.74	A
	ATOM	2014	CA	ASP	A	270	27.879	59.042	16.006	1.00	10.41	A
	ATOM	2015	CB	ASP	A	270	27.196	60.416	16.178	1.00	11.57	A
	ATOM	2016	CG	ASP	A	270	25.710	60.404	15.861	1.00	11.76	A
	ATOM	2017	OD1	ASP	A	270	25.095	59.320	15.799	1.00	12.51	A
30	ATOM	2018	OD2	ASP	A	270	25.150	61.513	15.693	1.00	14.61	A
	ATOM	2019	C	ASP	A	270	27.292	57.998	16.950	1.00	10.60	A
	ATOM	2020	O	ASP	A	270	26.684	57.020	16.511	1.00	10.31	A
	ATOM	2021	N	ILE	A	271	27.492	58.192	18.246	1.00	10.34	A
	ATOM	2022	CA	ILE	A	271	27.027	57.212	19.214	1.00	10.55	A
35	ATOM	2023	CB	ILE	A	271	27.536	57.588	20.622	1.00	10.92	A
	ATOM	2024	CG2	ILE	A	271	27.035	56.589	21.659	1.00	10.05	A
	ATOM	2025	CG1	ILE	A	271	29.071	57.563	20.602	1.00	11.08	A
	ATOM	2026	CD1	ILE	A	271	29.745	58.096	21.846	1.00	11.63	A
	ATOM	2027	C	ILE	A	271	25.518	56.956	19.185	1.00	10.58	A
40	ATOM	2028	O	ILE	A	271	25.083	55.807	19.260	1.00	10.41	A
	ATOM	2029	N	PRO	A	272	24.700	58.011	19.057	1.00	10.98	A
	ATOM	2030	CD	PRO	A	272	24.985	59.453	19.156	1.00	11.33	A
	ATOM	2031	CA	PRO	A	272	23.255	57.758	19.022	1.00	10.92	A
	ATOM	2032	CB	PRO	A	272	22.665	59.160	18.878	1.00	11.04	A
45	ATOM	2033	CG	PRO	A	272	23.659	60.016	19.626	1.00	11.74	A
	ATOM	2034	C	PRO	A	272	22.826	56.829	17.876	1.00	11.69	A
	ATOM	2035	O	PRO	A	272	21.785	56.180	17.959	1.00	11.90	A
	ATOM	2036	N	HIS	A	273	23.629	56.750	16.815	1.00	10.74	A
	ATOM	2037	CA	HIS	A	273	23.278	55.908	15.672	1.00	10.78	A
50	ATOM	2038	CB	HIS	A	273	23.224	56.767	14.405	1.00	10.02	A
	ATOM	2039	CG	HIS	A	273	22.235	57.887	14.491	1.00	11.26	A
	ATOM	2040	CD2	HIS	A	273	22.380	59.169	14.901	1.00	9.55	A
	ATOM	2041	ND1	HIS	A	273	20.897	57.727	14.202	1.00	12.40	A
	ATOM	2042	CE1	HIS	A	273	20.261	58.862	14.433	1.00	9.52	A
55	ATOM	2043	NE2	HIS	A	273	21.137	59.753	14.859	1.00	13.79	A
	ATOM	2044	C	HIS	A	273	24.195	54.711	15.456	1.00	11.09	A
	ATOM	2045	O	HIS	A	273	24.260	54.165	14.353	1.00	11.15	A
	ATOM	2046	N	THR	A	274	24.891	54.287	16.508	1.00	11.34	A
	ATOM	2047	CA	THR	A	274	25.782	53.140	16.385	1.00	11.09	A

5	ATOM	2048	CB	THR	A	274	27.269	53.578	16.377	1.00	12.31	A
	ATOM	2049	OG1	THR	A	274	27.513	54.504	17.442	1.00	11.45	A
	ATOM	2050	CG2	THR	A	274	27.620	54.224	15.053	1.00	11.39	A
	ATOM	2051	C	THR	A	274	25.598	52.033	17.425	1.00	11.88	A
	ATOM	2052	O	THR	A	274	26.215	50.976	17.311	1.00	12.79	A
10	ATOM	2053	N	CYS	A	275	24.752	52.250	18.429	1.00	11.97	A
	ATOM	2054	CA	CYS	A	275	24.543	51.214	19.445	1.00	12.65	A
	ATOM	2055	C	CYS	A	275	23.361	50.321	19.105	1.00	12.65	A
	ATOM	2056	O	CYS	A	275	23.291	49.169	19.536	1.00	12.89	A
	ATOM	2057	CB	CYS	A	275	24.315	51.845	20.824	1.00	13.02	A
15	ATOM	2058	SG	CYS	A	275	22.586	51.943	21.413	1.00	13.25	A
	ATOM	2059	N	GLY	A	276	22.433	50.865	18.329	1.00	12.85	A
	ATOM	2060	CA	GLY	A	276	21.243	50.130	17.954	1.00	12.82	A
	ATOM	2061	C	GLY	A	276	20.329	51.021	17.139	1.00	12.23	A
	ATOM	2062	O	GLY	A	276	20.704	52.149	16.813	1.00	12.13	A
20	ATOM	2063	N	PRO	A	277	19.113	50.558	16.812	1.00	11.60	A
	ATOM	2064	CD	PRO	A	277	18.595	49.229	17.187	1.00	11.96	A
	ATOM	2065	CA	PRO	A	277	18.123	51.294	16.021	1.00	12.04	A
	ATOM	2066	CB	PRO	A	277	17.119	50.208	15.650	1.00	12.10	A
	ATOM	2067	CG	PRO	A	277	17.116	49.352	16.885	1.00	10.84	A
25	ATOM	2068	C	PRO	A	277	17.435	52.502	16.652	1.00	11.83	A
	ATOM	2069	O	PRO	A	277	16.844	53.310	15.938	1.00	12.62	A
	ATOM	2070	N	ASP	A	278	17.500	52.628	17.973	1.00	12.62	A
	ATOM	2071	CA	ASP	A	278	16.834	53.741	18.650	1.00	13.37	A
	ATOM	2072	CB	ASP	A	278	15.969	53.213	19.799	1.00	13.54	A
30	ATOM	2073	CG	ASP	A	278	15.045	54.274	20.368	1.00	14.93	A
	ATOM	2074	OD1	ASP	A	278	15.194	55.456	20.004	1.00	15.72	A
	ATOM	2075	OD2	ASP	A	278	14.168	53.925	21.185	1.00	15.70	A
	ATOM	2076	C	ASP	A	278	17.814	54.773	19.194	1.00	13.23	A
	ATOM	2077	O	ASP	A	278	18.426	54.568	20.241	1.00	13.99	A
35	ATOM	2078	N	PRO	A	279	17.962	55.908	18.493	1.00	13.69	A
	ATOM	2079	CD	PRO	A	279	17.262	56.315	17.263	1.00	13.30	A
	ATOM	2080	CA	PRO	A	279	18.886	56.952	18.944	1.00	13.86	A
	ATOM	2081	CB	PRO	A	279	18.834	57.975	17.809	1.00	13.40	A
	ATOM	2082	CG	PRO	A	279	17.448	57.815	17.269	1.00	13.26	A
40	ATOM	2083	C	PRO	A	279	18.537	57.555	20.302	1.00	14.31	A
	ATOM	2084	O	PRO	A	279	19.415	58.042	21.011	1.00	14.71	A
	ATOM	2085	N	LYS	A	280	17.260	57.518	20.669	1.00	15.00	A
	ATOM	2086	CA	LYS	A	280	16.841	58.061	21.957	1.00	16.46	A
	ATOM	2087	CB	LYS	A	280	15.316	58.029	22.084	1.00	17.95	A
45	ATOM	2088	CG	LYS	A	280	14.798	58.566	23.413	1.00	20.74	A
	ATOM	2089	CD	LYS	A	280	13.277	58.545	23.472	1.00	23.13	A
	ATOM	2090	CE	LYS	A	280	12.733	57.124	23.426	1.00	25.35	A
	ATOM	2091	NZ	LYS	A	280	13.197	56.302	24.586	1.00	27.48	A
	ATOM	2092	C	LYS	A	280	17.469	57.244	23.080	1.00	16.31	A
50	ATOM	2093	O	LYS	A	280	17.770	57.771	24.152	1.00	17.31	A
	ATOM	2094	N	VAL	A	281	17.669	55.953	22.828	1.00	15.76	A
	ATOM	2095	CA	VAL	A	281	18.276	55.067	23.814	1.00	14.99	A
	ATOM	2096	CB	VAL	A	281	17.837	53.598	23.602	1.00	15.83	A
	ATOM	2097	CG1	VAL	A	281	18.565	52.687	24.585	1.00	15.97	A
55	ATOM	2098	CG2	VAL	A	281	16.328	53.475	23.775	1.00	15.53	A
	ATOM	2099	C	VAL	A	281	19.797	55.132	23.720	1.00	14.77	A
	ATOM	2100	O	VAL	A	281	20.488	55.285	24.725	1.00	13.51	A
	ATOM	2101	N	CYS	A	282	20.317	55.021	22.503	1.00	13.87	A
	ATOM	2102	CA	CYS	A	282	21.759	55.056	22.296	1.00	13.58	A

5	ATOM	2103	C	CYS	A	282	22.402	56.340	22.804	1.00	13.26	A
	ATOM	2104	O	CYS	A	282	23.524	56.320	23.308	1.00	12.92	A
	ATOM	2105	CB	CYS	A	282	22.086	54.884	20.814	1.00	13.80	A
	ATOM	2106	SG	CYS	A	282	21.707	53.243	20.122	1.00	13.83	A
	ATOM	2107	N	CYS	A	283	21.695	57.458	22.673	1.00	12.97	A
	ATOM	2108	CA	CYS	A	283	22.241	58.727	23.130	1.00	13.37	A
	ATOM	2109	C	CYS	A	283	22.543	58.688	24.624	1.00	13.10	A
	ATOM	2110	O	CYS	A	283	23.435	59.387	25.102	1.00	12.57	A
10	ATOM	2111	CB	CYS	A	283	21.274	59.876	22.829	1.00	15.13	A
	ATOM	2112	SG	CYS	A	283	22.121	61.486	22.906	1.00	17.02	A
	ATOM	2113	N	GLN	A	284	21.804	57.860	25.359	1.00	12.91	A
	ATOM	2114	CA	GLN	A	284	22.003	57.740	26.797	1.00	13.67	A
15	ATOM	2115	CB	GLN	A	284	20.821	57.006	27.433	1.00	14.14	A
	ATOM	2116	CG	GLN	A	284	19.496	57.719	27.260	1.00	15.49	A
	ATOM	2117	CD	GLN	A	284	18.338	56.905	27.790	1.00	15.23	A
	ATOM	2118	OE1	GLN	A	284	18.315	56.530	28.962	1.00	17.22	A
	ATOM	2119	NE2	GLN	A	284	17.372	56.622	26.929	1.00	16.85	A
20	ATOM	2120	C	GLN	A	284	23.292	57.009	27.136	1.00	13.15	A
	ATOM	2121	O	GLN	A	284	23.675	56.925	28.302	1.00	13.79	A
	ATOM	2122	N	PHE	A	285	23.960	56.479	26.116	1.00	12.56	A
	ATOM	2123	CA	PHE	A	285	25.201	55.759	26.336	1.00	12.06	A
	ATOM	2124	CB	PHE	A	285	25.045	54.319	25.839	1.00	12.17	A
	ATOM	2125	CG	PHE	A	285	24.074	53.520	26.671	1.00	12.29	A
25	ATOM	2126	CD1	PHE	A	285	24.485	52.917	27.858	1.00	12.76	A
	ATOM	2127	CD2	PHE	A	285	22.728	53.453	26.317	1.00	13.09	A
	ATOM	2128	CE1	PHE	A	285	23.565	52.262	28.686	1.00	13.11	A
	ATOM	2129	CE2	PHE	A	285	21.800	52.803	27.136	1.00	14.38	A
30	ATOM	2130	CZ	PHE	A	285	22.221	52.208	28.324	1.00	13.55	A
	ATOM	2131	C	PHE	A	285	26.414	56.471	25.748	1.00	11.90	A
	ATOM	2132	O	PHE	A	285	27.469	55.876	25.521	1.00	11.81	A
	ATOM	2133	N	ASP	A	286	26.233	57.764	25.504	1.00	11.70	A
	ATOM	2134	CA	ASP	A	286	27.303	58.639	25.038	1.00	11.79	A
	ATOM	2135	CB	ASP	A	286	26.844	59.533	23.889	1.00	11.90	A
	ATOM	2136	CG	ASP	A	286	27.944	60.464	23.414	1.00	11.44	A
35	ATOM	2137	OD1	ASP	A	286	28.966	60.569	24.128	1.00	12.21	A
	ATOM	2138	OD2	ASP	A	286	27.790	61.092	22.347	1.00	11.77	A
	ATOM	2139	C	ASP	A	286	27.497	59.475	26.298	1.00	11.97	A
	ATOM	2140	O	ASP	A	286	26.840	60.497	26.488	1.00	11.60	A
40	ATOM	2141	N	PHE	A	287	28.395	59.028	27.165	1.00	11.38	A
	ATOM	2142	CA	PHE	A	287	28.603	59.697	28.437	1.00	12.39	A
	ATOM	2143	CB	PHE	A	287	29.377	58.764	29.374	1.00	12.11	A
	ATOM	2144	CG	PHE	A	287	28.648	57.473	29.651	1.00	12.28	A
	ATOM	2145	CD1	PHE	A	287	28.821	56.366	28.826	1.00	12.95	A
45	ATOM	2146	CD2	PHE	A	287	27.717	57.397	30.683	1.00	13.46	A
	ATOM	2147	CE1	PHE	A	287	28.076	55.206	29.020	1.00	13.22	A
	ATOM	2148	CE2	PHE	A	287	26.964	56.239	30.885	1.00	12.89	A
	ATOM	2149	CZ	PHE	A	287	27.143	55.141	30.049	1.00	13.07	A
	ATOM	2150	C	PHE	A	287	29.207	61.091	28.414	1.00	13.59	A
50	ATOM	2151	O	PHE	A	287	29.405	61.695	29.465	1.00	14.01	A
	ATOM	2152	N	LYS	A	288	29.482	61.620	27.227	1.00	14.45	A
	ATOM	2153	CA	LYS	A	288	30.023	62.970	27.149	1.00	15.44	A
	ATOM	2154	CB	LYS	A	288	30.933	63.128	25.924	1.00	15.21	A
55	ATOM	2155	CG	LYS	A	288	31.689	64.457	25.905	1.00	14.15	A
	ATOM	2156	CD	LYS	A	288	32.592	64.586	24.684	1.00	13.96	A
	ATOM	2157	CE	LYS	A	288	33.413	65.868	24.753	1.00	13.29	A

	ATOM	2158	NZ	LYS	A	288	34.359	66.002	23.603	1.00	14.76	A
	ATOM	2159	C	LYS	A	288	28.866	63.968	27.060	1.00	16.58	A
	ATOM	2160	O	LYS	A	288	29.080	65.176	27.059	1.00	16.11	A
5	ATOM	2161	N	ARG	A	289	27.637	63.461	27.007	1.00	17.84	A
	ATOM	2162	CA	ARG	A	289	26.471	64.335	26.894	1.00	20.20	A
	ATOM	2163	CB	ARG	A	289	25.498	63.776	25.852	1.00	18.53	A
	ATOM	2164	CG	ARG	A	289	26.110	63.516	24.487	1.00	16.64	A
	ATOM	2165	CD	ARG	A	289	25.021	63.230	23.477	1.00	15.80	A
10	ATOM	2166	NE	ARG	A	289	25.545	62.852	22.168	1.00	13.90	A
	ATOM	2167	CZ	ARG	A	289	25.094	63.347	21.021	1.00	14.07	A
	ATOM	2168	NH1	ARG	A	289	24.119	64.248	21.023	1.00	14.29	A
	ATOM	2169	NH2	ARG	A	289	25.603	62.931	19.871	1.00	13.78	A
	ATOM	2170	C	ARG	A	289	25.701	64.571	28.193	1.00	23.25	A
15	ATOM	2171	O	ARG	A	289	24.473	64.635	28.174	1.00	23.38	A
	ATOM	2172	N	MSE	A	290	26.398	64.717	29.314	1.00	27.14	A
	ATOM	2173	CA	MSE	A	290	25.691	64.930	30.572	1.00	30.56	A
	ATOM	2174	CB	MSE	A	290	26.309	64.067	31.681	1.00	33.87	A
	ATOM	2175	CG	MSE	A	290	26.223	62.573	31.377	1.00	37.48	A
20	ATOM	2176	SE	MSE	A	290	26.343	61.383	32.902	1.00	42.06	A
	ATOM	2177	CE	MSE	A	290	28.253	61.093	32.905	1.00	40.46	A
	ATOM	2178	C	MSE	A	290	25.578	66.389	31.019	1.00	30.92	A
	ATOM	2179	O	MSE	A	290	24.852	66.690	31.971	1.00	31.50	A
	ATOM	2180	N	GLY	A	291	26.278	67.294	30.338	1.00	30.12	A
25	ATOM	2181	CA	GLY	A	291	26.182	68.701	30.698	1.00	28.34	A
	ATOM	2182	C	GLY	A	291	27.455	69.531	30.733	1.00	27.01	A
	ATOM	2183	O	GLY	A	291	27.560	70.545	30.040	1.00	27.30	A
	ATOM	2184	N	SER	A	292	28.422	69.108	31.541	1.00	24.80	A
	ATOM	2185	CA	SER	A	292	29.682	69.831	31.686	1.00	21.72	A
30	ATOM	2186	CB	SER	A	292	30.552	69.152	32.744	1.00	22.53	A
	ATOM	2187	OG	SER	A	292	30.886	67.833	32.350	1.00	22.82	A
	ATOM	2188	C	SER	A	292	30.488	69.984	30.396	1.00	20.05	A
	ATOM	2189	O	SER	A	292	31.362	70.848	30.311	1.00	18.67	A
	ATOM	2190	N	PHE	A	293	30.202	69.151	29.399	1.00	18.19	A
35	ATOM	2191	CA	PHE	A	293	30.919	69.220	28.128	1.00	17.46	A
	ATOM	2192	CB	PHE	A	293	31.136	67.819	27.546	1.00	16.98	A
	ATOM	2193	CG	PHE	A	293	32.049	66.956	28.361	1.00	15.98	A
	ATOM	2194	CD1	PHE	A	293	31.535	66.066	29.295	1.00	16.38	A
	ATOM	2195	CD2	PHE	A	293	33.427	67.032	28.191	1.00	15.50	A
40	ATOM	2196	CE1	PHE	A	293	32.383	65.258	30.050	1.00	16.47	A
	ATOM	2197	CE2	PHE	A	293	34.284	66.230	28.939	1.00	16.29	A
	ATOM	2198	CZ	PHE	A	293	33.760	65.342	29.870	1.00	16.44	A
	ATOM	2199	C	PHE	A	293	30.197	70.070	27.095	1.00	17.55	A
	ATOM	2200	O	PHE	A	293	30.658	70.200	25.960	1.00	16.94	A
45	ATOM	2201	N	GLY	A	294	29.064	70.644	27.484	1.00	17.08	A
	ATOM	2202	CA	GLY	A	294	28.314	71.471	26.557	1.00	17.66	A
	ATOM	2203	C	GLY	A	294	27.592	70.671	25.489	1.00	17.59	A
	ATOM	2204	O	GLY	A	294	27.302	71.181	24.407	1.00	18.62	A
	ATOM	2205	N	LEU	A	295	27.309	69.409	25.788	1.00	17.46	A
50	ATOM	2206	CA	LEU	A	295	26.604	68.543	24.854	1.00	17.07	A
	ATOM	2207	CB	LEU	A	295	27.514	67.400	24.392	1.00	17.17	A
	ATOM	2208	CG	LEU	A	295	28.783	67.787	23.625	1.00	17.32	A
	ATOM	2209	CD1	LEU	A	295	29.647	66.554	23.406	1.00	17.83	A
	ATOM	2210	CD2	LEU	A	295	28.405	68.418	22.290	1.00	17.46	A
	ATOM	2211	C	LEU	A	295	25.379	67.972	25.552	1.00	17.33	A
55	ATOM	2212	O	LEU	A	295	25.344	67.869	26.777	1.00	18.00	A

5	ATOM	2213	N	SER	A	296	24.371	67.610	24.769	1.00	17.40	A
	ATOM	2214	CA	SER	A	296	23.147	67.047	25.319	1.00	18.18	A
	ATOM	2215	CB	SER	A	296	22.162	68.167	25.679	1.00	18.23	A
	ATOM	2216	OG	SER	A	296	21.859	68.973	24.553	1.00	19.31	A
	ATOM	2217	C	SER	A	296	22.518	66.101	24.310	1.00	18.33	A
10	ATOM	2218	O	SER	A	296	23.031	65.931	23.203	1.00	17.91	A
	ATOM	2219	N	CYS	A	297	21.415	65.476	24.708	1.00	18.81	A
	ATOM	2220	CA	CYS	A	297	20.698	64.549	23.842	1.00	19.38	A
	ATOM	2221	C	CYS	A	297	19.429	65.212	23.322	1.00	19.86	A
	ATOM	2222	O	CYS	A	297	18.542	65.562	24.098	1.00	20.21	A
15	ATOM	2223	CB	CYS	A	297	20.355	63.268	24.609	1.00	19.22	A
	ATOM	2224	SG	CYS	A	297	21.786	62.162	24.797	1.00	20.14	A
	ATOM	2225	N	PRO	A	298	19.332	65.400	21.997	1.00	19.98	A
	ATOM	2226	CD	PRO	A	298	20.330	65.059	20.966	1.00	20.03	A
	ATOM	2227	CA	PRO	A	298	18.154	66.031	21.395	1.00	20.06	A
20	ATOM	2228	CB	PRO	A	298	18.557	66.189	19.929	1.00	20.76	A
	ATOM	2229	CG	PRO	A	298	19.494	65.041	19.709	1.00	20.96	A
	ATOM	2230	C	PRO	A	298	16.863	65.237	21.571	1.00	19.89	A
	ATOM	2231	O	PRO	A	298	15.772	65.778	21.399	1.00	20.14	A
	ATOM	2232	N	TRP	A	299	16.991	63.961	21.921	1.00	19.23	A
25	ATOM	2233	CA	TRP	A	299	15.827	63.105	22.124	1.00	19.96	A
	ATOM	2234	CB	TRP	A	299	16.196	61.644	21.833	1.00	19.20	A
	ATOM	2235	CG	TRP	A	299	16.531	61.437	20.381	1.00	18.35	A
	ATOM	2236	CD2	TRP	A	299	17.834	61.499	19.781	1.00	18.02	A
	ATOM	2237	CE2	TRP	A	299	17.662	61.346	18.388	1.00	18.44	A
30	ATOM	2238	CE3	TRP	A	299	19.130	61.674	20.286	1.00	18.03	A
	ATOM	2239	CD1	TRP	A	299	15.650	61.248	19.355	1.00	18.36	A
	ATOM	2240	NE1	TRP	A	299	16.321	61.193	18.155	1.00	19.07	A
	ATOM	2241	CZ2	TRP	A	299	18.738	61.363	17.492	1.00	18.17	A
	ATOM	2242	CZ3	TRP	A	299	20.200	61.691	19.396	1.00	18.03	A
35	ATOM	2243	CH2	TRP	A	299	19.994	61.536	18.014	1.00	17.94	A
	ATOM	2244	C	TRP	A	299	15.247	63.270	23.530	1.00	21.12	A
	ATOM	2245	O	TRP	A	299	14.351	62.531	23.937	1.00	21.04	A
	ATOM	2246	N	LYS	A	300	15.783	64.242	24.265	1.00	22.23	A
	ATOM	2247	CA	LYS	A	300	15.306	64.591	25.606	1.00	23.37	A
40	ATOM	2248	CB	LYS	A	300	13.795	64.829	25.552	1.00	25.08	A
	ATOM	2249	CG	LYS	A	300	13.400	65.978	24.643	1.00	26.56	A
	ATOM	2250	CD	LYS	A	300	11.890	66.085	24.505	1.00	28.74	A
	ATOM	2251	CE	LYS	A	300	11.497	67.267	23.632	1.00	29.78	A
	ATOM	2252	NZ	LYS	A	300	11.893	68.565	24.247	1.00	31.18	A
45	ATOM	2253	C	LYS	A	300	15.628	63.703	26.806	1.00	23.29	A
	ATOM	2254	O	LYS	A	300	15.248	64.032	27.930	1.00	23.45	A
	ATOM	2255	N	VAL	A	301	16.304	62.579	26.591	1.00	22.63	A
	ATOM	2256	CA	VAL	A	301	16.669	61.717	27.709	1.00	22.92	A
	ATOM	2257	CB	VAL	A	301	16.100	60.282	27.553	1.00	23.50	A
50	ATOM	2258	CG1	VAL	A	301	14.582	60.328	27.567	1.00	24.41	A
	ATOM	2259	CG2	VAL	A	301	16.582	59.652	26.267	1.00	24.91	A
	ATOM	2260	C	VAL	A	301	18.191	61.686	27.783	1.00	22.38	A
	ATOM	2261	O	VAL	A	301	18.858	61.129	26.913	1.00	22.87	A
	ATOM	2262	N	PRO	A	302	18.761	62.302	28.827	1.00	21.66	A
55	ATOM	2263	CD	PRO	A	302	18.069	63.041	29.901	1.00	21.57	A
	ATOM	2264	CA	PRO	A	302	20.211	62.357	29.013	1.00	21.07	A
	ATOM	2265	CB	PRO	A	302	20.375	63.492	30.014	1.00	21.45	A
	ATOM	2266	CG	PRO	A	302	19.184	63.292	30.899	1.00	21.82	A
	ATOM	2267	C	PRO	A	302	20.851	61.072	29.513	1.00	20.23	A

5	ATOM	2268	O	PRO	A	302	20.179	60.190	30.050	1.00	19.53	A
	ATOM	2269	N	PRO	A	303	22.170	60.941	29.323	1.00	19.82	A
	ATOM	2270	CD	PRO	A	303	23.105	61.819	28.596	1.00	19.67	A
	ATOM	2271	CA	PRO	A	303	22.835	59.730	29.798	1.00	19.97	A
	ATOM	2272	CB	PRO	A	303	24.204	59.800	29.126	1.00	19.91	A
10	ATOM	2273	CG	PRO	A	303	24.451	61.270	29.009	1.00	20.65	A
	ATOM	2274	C	PRO	A	303	22.919	59.817	31.318	1.00	20.45	A
	ATOM	2275	O	PRO	A	303	22.892	60.912	31.885	1.00	19.95	A
	ATOM	2276	N	ARG	A	304	22.992	58.667	31.974	1.00	20.89	A
	ATOM	2277	CA	ARG	A	304	23.089	58.624	33.424	1.00	22.04	A
15	ATOM	2278	CB	ARG	A	304	21.800	58.056	34.028	1.00	25.18	A
	ATOM	2279	CG	ARG	A	304	20.672	59.076	34.134	1.00	29.57	A
	ATOM	2280	CD	ARG	A	304	19.369	58.432	34.585	1.00	33.21	A
	ATOM	2281	NE	ARG	A	304	18.778	57.601	33.540	1.00	36.53	A
	ATOM	2282	CZ	ARG	A	304	18.380	58.058	32.355	1.00	37.94	A
20	ATOM	2283	NH1	ARG	A	304	18.509	59.345	32.057	1.00	38.71	A
	ATOM	2284	NH2	ARG	A	304	17.851	57.229	31.466	1.00	38.86	A
	ATOM	2285	C	ARG	A	304	24.279	57.777	33.837	1.00	20.49	A
	ATOM	2286	O	ARG	A	304	24.479	56.674	33.323	1.00	19.54	A
	ATOM	2287	N	THR	A	305	25.074	58.306	34.760	1.00	19.35	A
25	ATOM	2288	CA	THR	A	305	26.251	57.607	35.253	1.00	18.46	A
	ATOM	2289	CB	THR	A	305	26.901	58.378	36.418	1.00	18.86	A
	ATOM	2290	OG1	THR	A	305	27.312	59.671	35.955	1.00	20.18	A
	ATOM	2291	CG2	THR	A	305	28.108	57.629	36.957	1.00	19.09	A
	ATOM	2292	C	THR	A	305	25.864	56.216	35.729	1.00	17.72	A
30	ATOM	2293	O	THR	A	305	24.914	56.056	36.495	1.00	18.70	A
	ATOM	2294	N	ILE	A	306	26.598	55.210	35.268	1.00	16.09	A
	ATOM	2295	CA	ILE	A	306	26.306	53.837	35.654	1.00	16.08	A
	ATOM	2296	CB	ILE	A	306	27.031	52.829	34.738	1.00	15.93	A
	ATOM	2297	CG2	ILE	A	306	26.627	51.403	35.113	1.00	14.98	A
35	ATOM	2298	CG1	ILE	A	306	26.689	53.110	33.271	1.00	14.91	A
	ATOM	2299	CD1	ILE	A	306	25.204	53.036	32.943	1.00	14.74	A
	ATOM	2300	C	ILE	A	306	26.717	53.579	37.101	1.00	17.29	A
	ATOM	2301	O	ILE	A	306	27.793	53.989	37.539	1.00	17.58	A
	ATOM	2302	N	SER	A	307	25.844	52.898	37.839	1.00	18.29	A
40	ATOM	2303	CA	SER	A	307	26.094	52.571	39.238	1.00	20.08	A
	ATOM	2304	CB	SER	A	307	25.339	53.539	40.151	1.00	19.58	A
	ATOM	2305	OG	SER	A	307	23.939	53.426	39.962	1.00	20.03	A
	ATOM	2306	C	SER	A	307	25.605	51.154	39.496	1.00	21.11	A
	ATOM	2307	O	SER	A	307	24.856	50.600	38.696	1.00	20.76	A
45	ATOM	2308	N	ASP	A	308	26.029	50.569	40.612	1.00	22.96	A
	ATOM	2309	CA	ASP	A	308	25.604	49.219	40.966	1.00	24.81	A
	ATOM	2310	CB	ASP	A	308	26.243	48.800	42.292	1.00	26.28	A
	ATOM	2311	CG	ASP	A	308	27.729	48.532	42.165	1.00	27.47	A
	ATOM	2312	OD1	ASP	A	308	28.388	49.190	41.333	1.00	28.21	A
50	ATOM	2313	OD2	ASP	A	308	28.244	47.669	42.907	1.00	28.87	A
	ATOM	2314	C	ASP	A	308	24.085	49.210	41.099	1.00	25.44	A
	ATOM	2315	O	ASP	A	308	23.432	48.185	40.908	1.00	24.73	A
	ATOM	2316	N	GLN	A	309	23.538	50.378	41.412	1.00	26.20	A
	ATOM	2317	CA	GLN	A	309	22.107	50.564	41.600	1.00	27.19	A
55	ATOM	2318	CB	GLN	A	309	21.883	51.841	42.418	1.00	29.43	A
	ATOM	2319	CG	GLN	A	309	20.482	52.415	42.375	1.00	31.19	A
	ATOM	2320	CD	GLN	A	309	20.365	53.699	43.180	1.00	32.48	A
	ATOM	2321	OE1	GLN	A	309	19.472	54.514	42.948	1.00	32.65	A
	ATOM	2322	NE2	GLN	A	309	21.266	53.880	44.138	1.00	32.90	A

5	ATOM	2323	C	GLN	A	309	21.283	50.609	40.311	1.00	26.61	A
	ATOM	2324	O	GLN	A	309	20.108	50.240	40.314	1.00	27.21	A
	ATOM	2325	N	ASN	A	310	21.882	51.052	39.209	1.00	24.42	A
	ATOM	2326	CA	ASN	A	310	21.139	51.128	37.954	1.00	22.88	A
	ATOM	2327	CB	ASN	A	310	21.008	52.585	37.493	1.00	22.90	A
10	ATOM	2328	CG	ASN	A	310	22.346	53.205	37.122	1.00	22.75	A
	ATOM	2329	OD1	ASN	A	310	23.261	52.516	36.676	1.00	21.47	A
	ATOM	2330	ND2	ASN	A	310	22.455	54.519	37.287	1.00	22.83	A
	ATOM	2331	C	ASN	A	310	21.733	50.314	36.810	1.00	21.49	A
	ATOM	2332	O	ASN	A	310	21.148	50.254	35.731	1.00	20.97	A
15	ATOM	2333	N	VAL	A	311	22.881	49.687	37.042	1.00	20.33	A
	ATOM	2334	CA	VAL	A	311	23.546	48.921	35.991	1.00	19.01	A
	ATOM	2335	CB	VAL	A	311	24.889	48.332	36.490	1.00	18.91	A
	ATOM	2336	CG1	VAL	A	311	24.640	47.246	37.520	1.00	18.96	A
	ATOM	2337	CG2	VAL	A	311	25.696	47.800	35.307	1.00	18.47	A
20	ATOM	2338	C	VAL	A	311	22.694	47.804	35.389	1.00	19.05	A
	ATOM	2339	O	VAL	A	311	22.771	47.546	34.189	1.00	17.89	A
	ATOM	2340	N	ALA	A	312	21.876	47.146	36.205	1.00	17.91	A
	ATOM	2341	CA	ALA	A	312	21.035	46.073	35.685	1.00	17.95	A
	ATOM	2342	CB	ALA	A	312	20.285	45.386	36.828	1.00	18.00	A
25	ATOM	2343	C	ALA	A	312	20.046	46.609	34.652	1.00	17.45	A
	ATOM	2344	O	ALA	A	312	19.895	46.033	33.574	1.00	17.13	A
	ATOM	2345	N	ALA	A	313	19.377	47.712	34.979	1.00	17.23	A
	ATOM	2346	CA	ALA	A	313	18.402	48.316	34.074	1.00	17.36	A
	ATOM	2347	CB	ALA	A	313	17.579	49.367	34.813	1.00	17.23	A
30	ATOM	2348	C	ALA	A	313	19.075	48.946	32.858	1.00	17.38	A
	ATOM	2349	O	ALA	A	313	18.564	48.854	31.741	1.00	17.13	A
	ATOM	2350	N	ARG	A	314	20.215	49.591	33.079	1.00	17.39	A
	ATOM	2351	CA	ARG	A	314	20.947	50.228	31.989	1.00	17.17	A
	ATOM	2352	CB	ARG	A	314	22.158	50.990	32.533	1.00	17.21	A
35	ATOM	2353	CG	ARG	A	314	21.830	52.175	33.433	1.00	17.48	A
	ATOM	2354	CD	ARG	A	314	21.503	53.431	32.635	1.00	19.04	A
	ATOM	2355	NE	ARG	A	314	20.138	53.446	32.120	1.00	19.31	A
	ATOM	2356	CZ	ARG	A	314	19.659	54.381	31.306	1.00	19.35	A
	ATOM	2357	NH1	ARG	A	314	20.439	55.377	30.905	1.00	19.82	A
40	ATOM	2358	NH2	ARG	A	314	18.396	54.338	30.908	1.00	19.86	A
	ATOM	2359	C	ARG	A	314	21.420	49.160	31.010	1.00	17.18	A
	ATOM	2360	O	ARG	A	314	21.331	49.334	29.794	1.00	16.68	A
	ATOM	2361	N	SER	A	315	21.921	48.053	31.552	1.00	16.39	A
	ATOM	2362	CA	SER	A	315	22.412	46.949	30.730	1.00	16.91	A
45	ATOM	2363	CB	SER	A	315	23.072	45.879	31.605	1.00	15.94	A
	ATOM	2364	OG	SER	A	315	24.251	46.372	32.217	1.00	16.96	A
	ATOM	2365	C	SER	A	315	21.284	46.319	29.929	1.00	17.74	A
	ATOM	2366	O	SER	A	315	21.459	45.971	28.762	1.00	17.97	A
	ATOM	2367	N	ASP	A	316	20.123	46.170	30.556	1.00	18.36	A
50	ATOM	2368	CA	ASP	A	316	18.985	45.573	29.875	1.00	19.21	A
	ATOM	2369	CB	ASP	A	316	17.793	45.468	30.828	1.00	20.93	A
	ATOM	2370	CG	ASP	A	316	16.731	44.517	30.321	1.00	22.66	A
	ATOM	2371	OD1	ASP	A	316	17.092	43.388	29.924	1.00	24.08	A
	ATOM	2372	OD2	ASP	A	316	15.541	44.894	30.324	1.00	24.17	A
55	ATOM	2373	C	ASP	A	316	18.611	46.398	28.645	1.00	18.91	A
	ATOM	2374	O	ASP	A	316	18.301	45.845	27.590	1.00	18.46	A
	ATOM	2375	N	LEU	A	317	18.653	47.720	28.778	1.00	18.38	A
	ATOM	2376	CA	LEU	A	317	18.328	48.606	27.664	1.00	18.01	A
	ATOM	2377	CB	LEU	A	317	18.223	50.057	28.145	1.00	19.46	A

5	ATOM	2378	CG	LEU	A	317	16.873	50.535	28.682	1.00	20.53	A
	ATOM	2379	CD1	LEU	A	317	17.023	51.923	29.288	1.00	21.52	A
	ATOM	2380	CD2	LEU	A	317	15.855	50.552	27.550	1.00	20.96	A
	ATOM	2381	C	LEU	A	317	19.376	48.523	26.560	1.00	16.98	A
	ATOM	2382	O	LEU	A	317	19.041	48.400	25.382	1.00	16.42	A
10	ATOM	2383	N	LEU	A	318	20.645	48.583	26.949	1.00	15.99	A
	ATOM	2384	CA	LEU	A	318	21.740	48.541	25.985	1.00	15.31	A
	ATOM	2385	CB	LEU	A	318	23.067	48.836	26.687	1.00	14.88	A
	ATOM	2386	CG	LEU	A	318	24.286	48.971	25.768	1.00	15.10	A
	ATOM	2387	CD1	LEU	A	318	24.029	50.057	24.731	1.00	14.72	A
15	ATOM	2388	CD2	LEU	A	318	25.514	49.305	26.600	1.00	14.28	A
	ATOM	2389	C	LEU	A	318	21.840	47.217	25.237	1.00	15.11	A
	ATOM	2390	O	LEU	A	318	21.967	47.198	24.012	1.00	15.57	A
	ATOM	2391	N	VAL	A	319	21.786	46.108	25.967	1.00	14.42	A
	ATOM	2392	CA	VAL	A	319	21.871	44.799	25.331	1.00	13.85	A
20	ATOM	2393	CB	VAL	A	319	21.846	43.664	26.380	1.00	13.47	A
	ATOM	2394	CG1	VAL	A	319	21.744	42.313	25.690	1.00	13.87	A
	ATOM	2395	CG2	VAL	A	319	23.113	43.716	27.219	1.00	14.11	A
	ATOM	2396	C	VAL	A	319	20.719	44.611	24.346	1.00	14.16	A
	ATOM	2397	O	VAL	A	319	20.881	43.986	23.298	1.00	13.52	A
25	ATOM	2398	N	ASP	A	320	19.554	45.153	24.683	1.00	14.86	A
	ATOM	2399	CA	ASP	A	320	18.398	45.047	23.802	1.00	15.02	A
	ATOM	2400	CB	ASP	A	320	17.170	45.680	24.462	1.00	16.85	A
	ATOM	2401	CG	ASP	A	320	15.951	45.656	23.568	1.00	16.80	A
	ATOM	2402	OD1	ASP	A	320	15.498	46.742	23.155	1.00	17.63	A
30	ATOM	2403	OD2	ASP	A	320	15.448	44.551	23.276	1.00	18.36	A
	ATOM	2404	C	ASP	A	320	18.709	45.740	22.474	1.00	14.37	A
	ATOM	2405	O	ASP	A	320	18.373	45.231	21.404	1.00	13.82	A
	ATOM	2406	N	GLN	A	321	19.351	46.903	22.547	1.00	13.70	A
	ATOM	2407	CA	GLN	A	321	19.722	47.639	21.343	1.00	12.86	A
35	ATOM	2408	CB	GLN	A	321	20.332	48.994	21.711	1.00	11.83	A
	ATOM	2409	CG	GLN	A	321	19.315	50.024	22.159	1.00	12.86	A
	ATOM	2410	CD	GLN	A	321	18.279	50.298	21.088	1.00	14.18	A
	ATOM	2411	OE1	GLN	A	321	18.612	50.718	19.980	1.00	14.25	A
	ATOM	2412	NE2	GLN	A	321	17.013	50.059	21.412	1.00	14.45	A
40	ATOM	2413	C	GLN	A	321	20.735	46.829	20.542	1.00	12.45	A
	ATOM	2414	O	GLN	A	321	20.627	46.707	19.321	1.00	12.50	A
	ATOM	2415	N	TRP	A	322	21.722	46.277	21.240	1.00	12.86	A
	ATOM	2416	CA	TRP	A	322	22.749	45.475	20.590	1.00	12.89	A
	ATOM	2417	CB	TRP	A	322	23.773	44.969	21.609	1.00	11.98	A
45	ATOM	2418	CG	TRP	A	322	24.703	46.009	22.163	1.00	12.42	A
	ATOM	2419	CD2	TRP	A	322	25.605	45.841	23.261	1.00	11.60	A
	ATOM	2420	CE2	TRP	A	322	26.321	47.050	23.404	1.00	11.77	A
	ATOM	2421	CE3	TRP	A	322	25.879	44.782	24.138	1.00	12.07	A
	ATOM	2422	CD1	TRP	A	322	24.899	47.279	21.696	1.00	11.63	A
50	ATOM	2423	NE1	TRP	A	322	25.871	47.911	22.438	1.00	12.67	A
	ATOM	2424	CZ2	TRP	A	322	27.297	47.233	24.393	1.00	12.70	A
	ATOM	2425	CZ3	TRP	A	322	26.850	44.963	25.122	1.00	12.23	A
	ATOM	2426	CH2	TRP	A	322	27.545	46.180	25.240	1.00	12.89	A
	ATOM	2427	C	TRP	A	322	22.156	44.278	19.859	1.00	13.39	A
55	ATOM	2428	O	TRP	A	322	22.532	43.988	18.722	1.00	13.20	A
	ATOM	2429	N	LYS	A	323	21.236	43.575	20.511	1.00	12.94	A
	ATOM	2430	CA	LYS	A	323	20.632	42.404	19.890	1.00	13.54	A
	ATOM	2431	CB	LYS	A	323	19.855	41.593	20.930	1.00	14.32	A
	ATOM	2432	CG	LYS	A	323	20.799	40.871	21.888	1.00	15.76	A

5	ATOM	2433	CD	LYS	A	323	20.079	40.005	22.904	1.00	17.29	A
	ATOM	2434	CE	LYS	A	323	21.086	39.198	23.708	1.00	18.79	A
	ATOM	2435	NZ	LYS	A	323	20.428	38.323	24.710	1.00	21.17	A
	ATOM	2436	C	LYS	A	323	19.762	42.766	18.700	1.00	13.15	A
	ATOM	2437	O	LYS	A	323	19.599	41.968	17.780	1.00	13.47	A
10	ATOM	2438	N	LYS	A	324	19.207	43.970	18.706	1.00	13.05	A
	ATOM	2439	CA	LYS	A	324	18.406	44.406	17.570	1.00	12.21	A
	ATOM	2440	CB	LYS	A	324	17.600	45.655	17.930	1.00	12.37	A
	ATOM	2441	CG	LYS	A	324	16.388	45.327	18.789	1.00	13.50	A
	ATOM	2442	CD	LYS	A	324	15.678	46.561	19.319	1.00	13.76	A
15	ATOM	2443	CE	LYS	A	324	14.437	46.144	20.106	1.00	15.09	A
	ATOM	2444	NZ	LYS	A	324	13.801	47.285	20.820	1.00	16.19	A
	ATOM	2445	C	LYS	A	324	19.353	44.685	16.407	1.00	12.02	A
	ATOM	2446	O	LYS	A	324	19.080	44.304	15.270	1.00	11.97	A
	ATOM	2447	N	LYS	A	325	20.476	45.339	16.691	1.00	11.78	A
20	ATOM	2448	CA	LYS	A	325	21.447	45.624	15.639	1.00	11.37	A
	ATOM	2449	CB	LYS	A	325	22.614	46.454	16.191	1.00	10.87	A
	ATOM	2450	CG	LYS	A	325	23.515	47.051	15.105	1.00	10.75	A
	ATOM	2451	CD	LYS	A	325	24.642	47.893	15.698	1.00	11.00	A
	ATOM	2452	CE	LYS	A	325	25.433	48.604	14.603	1.00	11.39	A
25	ATOM	2453	NZ	LYS	A	325	26.585	49.360	15.164	1.00	12.31	A
	ATOM	2454	C	LYS	A	325	21.978	44.304	15.077	1.00	11.90	A
	ATOM	2455	O	LYS	A	325	22.136	44.147	13.865	1.00	11.75	A
	ATOM	2456	N	ALA	A	326	22.240	43.351	15.968	1.00	11.87	A
	ATOM	2457	CA	ALA	A	326	22.760	42.047	15.567	1.00	12.64	A
30	ATOM	2458	CB	ALA	A	326	23.024	41.192	16.804	1.00	12.66	A
	ATOM	2459	C	ALA	A	326	21.839	41.299	14.603	1.00	13.43	A
	ATOM	2460	O	ALA	A	326	22.294	40.453	13.831	1.00	13.86	A
	ATOM	2461	N	GLU	A	327	20.545	41.599	14.653	1.00	13.80	A
	ATOM	2462	CA	GLU	A	327	19.584	40.942	13.770	1.00	14.81	A
35	ATOM	2463	CB	GLU	A	327	18.153	41.327	14.152	1.00	16.43	A
	ATOM	2464	CG	GLU	A	327	17.575	40.504	15.277	1.00	18.89	A
	ATOM	2465	CD	GLU	A	327	17.577	39.020	14.960	1.00	18.94	A
	ATOM	2466	OE1	GLU	A	327	16.918	38.609	13.979	1.00	20.74	A
	ATOM	2467	OE2	GLU	A	327	18.244	38.265	15.691	1.00	20.08	A
40	ATOM	2468	C	GLU	A	327	19.810	41.296	12.308	1.00	14.28	A
	ATOM	2469	O	GLU	A	327	19.367	40.581	11.409	1.00	15.39	A
	ATOM	2470	N	LEU	A	328	20.504	42.404	12.075	1.00	13.70	A
	ATOM	2471	CA	LEU	A	328	20.764	42.860	10.718	1.00	12.00	A
	ATOM	2472	CB	LEU	A	328	20.932	44.384	10.707	1.00	12.41	A
45	ATOM	2473	CG	LEU	A	328	19.833	45.202	11.399	1.00	12.20	A
	ATOM	2474	CD1	LEU	A	328	20.108	46.687	11.208	1.00	13.82	A
	ATOM	2475	CD2	LEU	A	328	18.465	44.838	10.828	1.00	13.12	A
	ATOM	2476	C	LEU	A	328	21.984	42.206	10.075	1.00	12.08	A
	ATOM	2477	O	LEU	A	328	22.240	42.411	8.888	1.00	12.28	A
50	ATOM	2478	N	TYR	A	329	22.731	41.422	10.851	1.00	11.18	A
	ATOM	2479	CA	TYR	A	329	23.930	40.758	10.344	1.00	11.25	A
	ATOM	2480	CB	TYR	A	329	25.175	41.342	11.018	1.00	11.22	A
	ATOM	2481	CG	TYR	A	329	25.376	42.809	10.695	1.00	11.53	A
	ATOM	2482	CD1	TYR	A	329	24.786	43.808	11.477	1.00	11.42	A
55	ATOM	2483	CE1	TYR	A	329	24.917	45.157	11.147	1.00	12.31	A
	ATOM	2484	CD2	TYR	A	329	26.106	43.197	9.573	1.00	11.20	A
	ATOM	2485	CE2	TYR	A	329	26.241	44.545	9.233	1.00	11.91	A
	ATOM	2486	CZ	TYR	A	329	25.643	45.516	10.023	1.00	11.77	A
	ATOM	2487	OH	TYR	A	329	25.764	46.845	9.678	1.00	12.68	A

5	ATOM	2488	C	TYR	A	329	23.890	39.240	10.492	1.00	12.08	A
	ATOM	2489	O	TYR	A	329	23.029	38.703	11.188	1.00	12.83	A
	ATOM	2490	N	ARG	A	330	24.835	38.553	9.857	1.00	12.23	A
	ATOM	2491	CA	ARG	A	330	24.839	37.094	9.864	1.00	12.24	A
	ATOM	2492	CB	ARG	A	330	25.202	36.589	8.465	1.00	11.88	A
10	ATOM	2493	CG	ARG	A	330	24.278	37.129	7.393	1.00	11.69	A
	ATOM	2494	CD	ARG	A	330	24.531	36.502	6.035	1.00	12.77	A
	ATOM	2495	NE	ARG	A	330	23.611	37.062	5.052	1.00	12.25	A
	ATOM	2496	CZ	ARG	A	330	23.371	36.544	3.852	1.00	14.24	A
	ATOM	2497	NH1	ARG	A	330	23.986	35.437	3.461	1.00	15.29	A
15	ATOM	2498	NH2	ARG	A	330	22.503	37.137	3.043	1.00	14.59	A
	ATOM	2499	C	ARG	A	330	25.649	36.311	10.894	1.00	12.88	A
	ATOM	2500	O	ARG	A	330	25.425	35.109	11.046	1.00	14.62	A
	ATOM	2501	N	THR	A	331	26.584	36.950	11.588	1.00	12.94	A
	ATOM	2502	CA	THR	A	331	27.372	36.225	12.584	1.00	12.09	A
20	ATOM	2503	CB	THR	A	331	28.890	36.471	12.418	1.00	11.53	A
	ATOM	2504	OG1	THR	A	331	29.216	37.792	12.869	1.00	11.21	A
	ATOM	2505	CG2	THR	A	331	29.298	36.310	10.956	1.00	12.94	A
	ATOM	2506	C	THR	A	331	26.990	36.640	13.996	1.00	12.54	A
	ATOM	2507	O	THR	A	331	26.150	37.516	14.188	1.00	13.43	A
25	ATOM	2508	N	ASN	A	332	27.615	36.001	14.981	1.00	12.33	A
	ATOM	2509	CA	ASN	A	332	27.359	36.315	16.382	1.00	12.94	A
	ATOM	2510	CB	ASN	A	332	27.323	35.028	17.218	1.00	13.86	A
	ATOM	2511	CG	ASN	A	332	28.676	34.344	17.310	1.00	15.72	A
	ATOM	2512	OD1	ASN	A	332	29.431	34.298	16.342	1.00	17.44	A
30	ATOM	2513	ND2	ASN	A	332	28.979	33.789	18.481	1.00	17.45	A
	ATOM	2514	C	ASN	A	332	28.433	37.264	16.907	1.00	12.83	A
	ATOM	2515	O	ASN	A	332	28.721	37.300	18.105	1.00	13.18	A
	ATOM	2516	N	VAL	A	333	29.024	38.027	15.990	1.00	11.52	A
	ATOM	2517	CA	VAL	A	333	30.055	39.005	16.323	1.00	11.89	A
35	ATOM	2518	CB	VAL	A	333	31.356	38.731	15.536	1.00	11.95	A
	ATOM	2519	CG1	VAL	A	333	32.431	39.733	15.937	1.00	12.37	A
	ATOM	2520	CG2	VAL	A	333	31.827	37.312	15.796	1.00	13.46	A
	ATOM	2521	C	VAL	A	333	29.491	40.363	15.918	1.00	11.33	A
	ATOM	2522	O	VAL	A	333	29.179	40.582	14.752	1.00	11.56	A
40	ATOM	2523	N	LEU	A	334	29.368	41.273	16.880	1.00	10.67	A
	ATOM	2524	CA	LEU	A	334	28.789	42.584	16.618	1.00	10.61	A
	ATOM	2525	CB	LEU	A	334	27.590	42.796	17.550	1.00	10.83	A
	ATOM	2526	CG	LEU	A	334	26.775	44.076	17.371	1.00	11.05	A
	ATOM	2527	CD1	LEU	A	334	26.045	44.025	16.036	1.00	10.50	A
45	ATOM	2528	CD2	LEU	A	334	25.780	44.215	18.514	1.00	11.60	A
	ATOM	2529	C	LEU	A	334	29.759	43.750	16.770	1.00	10.02	A
	ATOM	2530	O	LEU	A	334	30.512	43.827	17.739	1.00	10.77	A
	ATOM	2531	N	LEU	A	335	29.724	44.663	15.805	1.00	10.11	A
	ATOM	2532	CA	LEU	A	335	30.585	45.839	15.827	1.00	9.42	A
50	ATOM	2533	CB	LEU	A	335	31.087	46.154	14.418	1.00	8.92	A
	ATOM	2534	CG	LEU	A	335	31.857	47.471	14.284	1.00	9.26	A
	ATOM	2535	CD1	LEU	A	335	33.158	47.388	15.065	1.00	11.05	A
	ATOM	2536	CD2	LEU	A	335	32.128	47.755	12.813	1.00	11.26	A
	ATOM	2537	C	LEU	A	335	29.812	47.041	16.351	1.00	9.28	A
55	ATOM	2538	O	LEU	A	335	28.774	47.405	15.800	1.00	10.12	A
	ATOM	2539	N	ILE	A	336	30.324	47.654	17.412	1.00	9.16	A
	ATOM	2540	CA	ILE	A	336	29.686	48.824	17.996	1.00	9.09	A
	ATOM	2541	CB	ILE	A	336	29.152	48.535	19.424	1.00	9.68	A
	ATOM	2542	CG2	ILE	A	336	28.562	49.805	20.024	1.00	10.04	A

5	ATOM	2543	CG1	ILE	A	336	28.089	47.432	19.383	1.00	9.33	A
	ATOM	2544	CD1	ILE	A	336	26.848	47.786	18.595	1.00	10.48	A
	ATOM	2545	C	ILE	A	336	30.674	49.988	18.074	1.00	8.75	A
	ATOM	2546	O	ILE	A	336	31.454	50.087	19.018	1.00	9.03	A
	ATOM	2547	N	PRO	A	337	30.674	50.871	17.061	1.00	8.98	A
	ATOM	2548	CD	PRO	A	337	29.982	50.807	15.763	1.00	8.96	A
	ATOM	2549	CA	PRO	A	337	31.598	52.008	17.104	1.00	9.22	A
	ATOM	2550	CB	PRO	A	337	31.359	52.702	15.764	1.00	8.51	A
10	ATOM	2551	CG	PRO	A	337	30.921	51.585	14.871	1.00	8.89	A
	ATOM	2552	C	PRO	A	337	31.217	52.913	18.271	1.00	8.95	A
	ATOM	2553	O	PRO	A	337	30.039	53.021	18.609	1.00	10.28	A
	ATOM	2554	N	LEU	A	338	32.210	53.548	18.886	1.00	8.46	A
15	ATOM	2555	CA	LEU	A	338	31.956	54.462	19.994	1.00	8.68	A
	ATOM	2556	CB	LEU	A	338	32.335	53.815	21.329	1.00	9.38	A
	ATOM	2557	CG	LEU	A	338	31.988	54.674	22.549	1.00	10.48	A
	ATOM	2558	CD1	LEU	A	338	30.481	54.631	22.801	1.00	11.37	A
	ATOM	2559	CD2	LEU	A	338	32.732	54.160	23.768	1.00	11.85	A
20	ATOM	2560	C	LEU	A	338	32.781	55.727	19.775	1.00	9.16	A
	ATOM	2561	O	LEU	A	338	33.925	55.823	20.220	1.00	9.47	A
	ATOM	2562	N	GLY	A	339	32.194	56.695	19.079	1.00	9.45	A
	ATOM	2563	CA	GLY	A	339	32.914	57.926	18.807	1.00	9.23	A
	ATOM	2564	C	GLY	A	339	32.105	58.931	18.017	1.00	9.65	A
	ATOM	2565	O	GLY	A	339	30.938	58.694	17.703	1.00	9.88	A
25	ATOM	2566	N	ASP	A	340	32.739	60.054	17.690	1.00	9.87	A
	ATOM	2567	CA	ASP	A	340	32.103	61.130	16.943	1.00	9.83	A
	ATOM	2568	CB	ASP	A	340	31.101	61.863	17.841	1.00	10.38	A
	ATOM	2569	CG	ASP	A	340	30.001	62.568	17.062	1.00	11.64	A
	ATOM	2570	OD1	ASP	A	340	30.195	62.883	15.865	1.00	11.74	A
30	ATOM	2571	OD2	ASP	A	340	28.937	62.826	17.667	1.00	12.92	A
	ATOM	2572	C	ASP	A	340	33.214	62.090	16.518	1.00	10.19	A
	ATOM	2573	O	ASP	A	340	34.401	61.792	16.683	1.00	9.86	A
	ATOM	2574	N	ASP	A	341	32.825	63.244	15.991	1.00	10.61	A
35	ATOM	2575	CA	ASP	A	341	33.785	64.242	15.532	1.00	10.48	A
	ATOM	2576	CB	ASP	A	341	33.048	65.413	14.884	1.00	12.00	A
	ATOM	2577	CG	ASP	A	341	32.468	65.055	13.534	1.00	13.27	A
	ATOM	2578	OD1	ASP	A	341	32.494	63.861	13.173	1.00	13.14	A
	ATOM	2579	OD2	ASP	A	341	31.984	65.972	12.832	1.00	17.12	A
40	ATOM	2580	C	ASP	A	341	34.694	64.765	16.637	1.00	10.31	A
	ATOM	2581	O	ASP	A	341	34.221	65.254	17.664	1.00	11.01	A
	ATOM	2582	N	PHE	A	342	36.000	64.657	16.404	1.00	9.63	A
	ATOM	2583	CA	PHE	A	342	37.018	65.114	17.342	1.00	9.96	A
	ATOM	2584	CB	PHE	A	342	37.207	66.632	17.204	1.00	10.12	A
	ATOM	2585	CG	PHE	A	342	37.737	67.057	15.856	1.00	10.10	A
45	ATOM	2586	CD1	PHE	A	342	36.873	67.462	14.838	1.00	10.88	A
	ATOM	2587	CD2	PHE	A	342	39.106	67.025	15.598	1.00	9.64	A
	ATOM	2588	CE1	PHE	A	342	37.367	67.828	13.583	1.00	10.53	A
	ATOM	2589	CE2	PHE	A	342	39.608	67.387	14.354	1.00	9.71	A
	ATOM	2590	CZ	PHE	A	342	38.737	67.790	13.342	1.00	9.85	A
50	ATOM	2591	C	PHE	A	342	36.746	64.731	18.800	1.00	10.16	A
	ATOM	2592	O	PHE	A	342	36.911	65.543	19.721	1.00	11.34	A
	ATOM	2593	N	ARG	A	343	36.339	63.482	19.002	1.00	9.86	A
	ATOM	2594	CA	ARG	A	343	36.068	62.981	20.345	1.00	10.14	A
55	ATOM	2595	CB	ARG	A	343	35.056	61.830	20.306	1.00	9.08	A
	ATOM	2596	CG	ARG	A	343	33.613	62.266	20.104	1.00	9.69	A
	ATOM	2597	CD	ARG	A	343	33.191	63.269	21.172	1.00	10.14	A

5	ATOM	2598	NE	ARG	A	343	31.763	63.572	21.122	1.00	11.19	A
	ATOM	2599	CZ	ARG	A	343	30.818	62.853	21.722	1.00	10.93	A
	ATOM	2600	NH1	ARG	A	343	31.135	61.774	22.427	1.00	10.27	A
	ATOM	2601	NH2	ARG	A	343	29.550	63.226	21.630	1.00	10.56	A
	ATOM	2602	C	ARG	A	343	37.340	62.510	21.041	1.00	11.10	A
10	ATOM	2603	O	ARG	A	343	38.410	62.413	20.427	1.00	10.83	A
	ATOM	2604	N	PHE	A	344	37.203	62.220	22.331	1.00	12.00	A
	ATOM	2605	CA	PHE	A	344	38.306	61.762	23.168	1.00	12.90	A
	ATOM	2606	CB	PHE	A	344	38.806	60.398	22.681	1.00	12.98	A
	ATOM	2607	CG	PHE	A	344	37.794	59.305	22.851	1.00	12.50	A
15	ATOM	2608	CD1	PHE	A	344	36.975	58.922	21.796	1.00	12.67	A
	ATOM	2609	CD2	PHE	A	344	37.608	58.710	24.095	1.00	13.77	A
	ATOM	2610	CE1	PHE	A	344	35.981	57.966	21.975	1.00	12.90	A
	ATOM	2611	CE2	PHE	A	344	36.617	57.752	24.286	1.00	13.51	A
	ATOM	2612	CZ	PHE	A	344	35.801	57.379	23.224	1.00	12.69	A
20	ATOM	2613	C	PHE	A	344	39.432	62.784	23.222	1.00	14.41	A
	ATOM	2614	O	PHE	A	344	40.609	62.458	23.059	1.00	14.24	A
	ATOM	2615	N	LYS	A	345	39.040	64.027	23.486	1.00	15.81	A
	ATOM	2616	CA	LYS	A	345	39.960	65.152	23.566	1.00	18.16	A
	ATOM	2617	CB	LYS	A	345	39.298	66.388	22.959	1.00	19.39	A
25	ATOM	2618	CG	LYS	A	345	40.104	67.660	23.093	1.00	21.38	A
	ATOM	2619	CD	LYS	A	345	39.333	68.841	22.535	1.00	23.37	A
	ATOM	2620	CE	LYS	A	345	40.093	70.139	22.721	1.00	24.23	A
	ATOM	2621	NZ	LYS	A	345	39.320	71.293	22.183	1.00	24.71	A
	ATOM	2622	C	LYS	A	345	40.388	65.463	24.997	1.00	19.45	A
30	ATOM	2623	O	LYS	A	345	41.571	65.661	25.268	1.00	21.28	A
	ATOM	2624	N	GLN	A	346	39.419	65.514	25.903	1.00	20.22	A
	ATOM	2625	CA	GLN	A	346	39.691	65.820	27.303	1.00	20.84	A
	ATOM	2626	CB	GLN	A	346	38.539	66.640	27.879	1.00	23.49	A
	ATOM	2627	CG	GLN	A	346	38.262	67.921	27.116	1.00	27.90	A
35	ATOM	2628	CD	GLN	A	346	36.943	68.547	27.504	1.00	30.08	A
	ATOM	2629	OE1	GLN	A	346	36.708	68.850	28.673	1.00	32.64	A
	ATOM	2630	NE2	GLN	A	346	36.068	68.742	26.522	1.00	31.15	A
	ATOM	2631	C	GLN	A	346	39.882	64.562	28.142	1.00	20.09	A
	ATOM	2632	O	GLN	A	346	39.241	63.540	27.902	1.00	18.93	A
40	ATOM	2633	N	ASN	A	347	40.763	64.647	29.135	1.00	19.30	A
	ATOM	2634	CA	ASN	A	347	41.021	63.515	30.015	1.00	18.58	A
	ATOM	2635	CB	ASN	A	347	42.034	63.896	31.098	1.00	20.07	A
	ATOM	2636	CG	ASN	A	347	43.427	64.081	30.546	1.00	21.88	A
	ATOM	2637	OD1	ASN	A	347	43.973	63.181	29.909	1.00	22.61	A
45	ATOM	2638	ND2	ASN	A	347	44.014	65.250	30.787	1.00	23.12	A
	ATOM	2639	C	ASN	A	347	39.725	63.067	30.669	1.00	17.30	A
	ATOM	2640	O	ASN	A	347	39.459	61.873	30.780	1.00	16.74	A
	ATOM	2641	N	THR	A	348	38.919	64.036	31.094	1.00	16.16	A
	ATOM	2642	CA	THR	A	348	37.647	63.738	31.737	1.00	15.64	A
50	ATOM	2643	CB	THR	A	348	36.932	65.032	32.191	1.00	16.49	A
	ATOM	2644	OG1	THR	A	348	36.836	65.945	31.090	1.00	17.92	A
	ATOM	2645	CG2	THR	A	348	37.702	65.692	33.332	1.00	17.02	A
	ATOM	2646	C	THR	A	348	36.732	62.956	30.803	1.00	14.77	A
	ATOM	2647	O	THR	A	348	35.929	62.139	31.256	1.00	14.29	A
55	ATOM	2648	N	GLU	A	349	36.851	63.207	29.501	1.00	12.93	A
	ATOM	2649	CA	GLU	A	349	36.033	62.497	28.523	1.00	12.93	A
	ATOM	2650	CB	GLU	A	349	36.149	63.146	27.142	1.00	12.36	A
	ATOM	2651	CG	GLU	A	349	35.352	62.407	26.079	1.00	12.45	A
	ATOM	2652	CD	GLU	A	349	35.495	62.998	24.691	1.00	12.49	A

5	ATOM	2653	OE1	GLU	A	349	34.930	62.400	23.754	1.00	13.64	A
	ATOM	2654	OE2	GLU	A	349	36.158	64.044	24.535	1.00	13.87	A
	ATOM	2655	C	GLU	A	349	36.469	61.037	28.437	1.00	12.59	A
	ATOM	2656	O	GLU	A	349	35.632	60.134	28.384	1.00	12.35	A
	ATOM	2657	N	TRP	A	350	37.778	60.804	28.414	1.00	12.37	A
10	ATOM	2658	CA	TRP	A	350	38.283	59.438	28.361	1.00	11.74	A
	ATOM	2659	CB	TRP	A	350	39.816	59.412	28.372	1.00	10.85	A
	ATOM	2660	CG	TRP	A	350	40.438	59.655	27.030	1.00	10.74	A
	ATOM	2661	CD2	TRP	A	350	40.744	58.664	26.042	1.00	11.29	A
	ATOM	2662	CE2	TRP	A	350	41.266	59.341	24.919	1.00	11.06	A
15	ATOM	2663	CE3	TRP	A	350	40.625	57.269	25.997	1.00	12.34	A
	ATOM	2664	CD1	TRP	A	350	40.780	60.861	26.482	1.00	11.42	A
	ATOM	2665	NE1	TRP	A	350	41.279	60.679	25.215	1.00	11.21	A
	ATOM	2666	CZ2	TRP	A	350	41.668	58.669	23.759	1.00	11.09	A
	ATOM	2667	CZ3	TRP	A	350	41.025	56.601	24.844	1.00	12.75	A
20	ATOM	2668	CH2	TRP	A	350	41.539	57.303	23.740	1.00	12.45	A
	ATOM	2669	C	TRP	A	350	37.752	58.675	29.569	1.00	12.68	A
	ATOM	2670	O	TRP	A	350	37.269	57.552	29.443	1.00	12.87	A
	ATOM	2671	N	ASP	A	351	37.828	59.300	30.739	1.00	13.49	A
	ATOM	2672	CA	ASP	A	351	37.357	58.670	31.965	1.00	14.43	A
25	ATOM	2673	CB	ASP	A	351	37.669	59.542	33.184	1.00	15.49	A
	ATOM	2674	CG	ASP	A	351	39.148	59.628	33.482	1.00	18.09	A
	ATOM	2675	OD1	ASP	A	351	39.866	58.633	33.250	1.00	19.99	A
	ATOM	2676	OD2	ASP	A	351	39.588	60.690	33.970	1.00	20.85	A
	ATOM	2677	C	ASP	A	351	35.864	58.374	31.960	1.00	13.60	A
30	ATOM	2678	O	ASP	A	351	35.451	57.260	32.286	1.00	14.13	A
	ATOM	2679	N	VAL	A	352	35.053	59.362	31.598	1.00	13.66	A
	ATOM	2680	CA	VAL	A	352	33.612	59.165	31.609	1.00	13.97	A
	ATOM	2681	CB	VAL	A	352	32.855	60.483	31.278	1.00	15.02	A
	ATOM	2682	CG1	VAL	A	352	32.894	60.769	29.791	1.00	15.28	A
35	ATOM	2683	CG2	VAL	A	352	31.429	60.401	31.788	1.00	16.97	A
	ATOM	2684	C	VAL	A	352	33.160	58.043	30.675	1.00	14.02	A
	ATOM	2685	O	VAL	A	352	32.286	57.256	31.031	1.00	14.06	A
	ATOM	2686	N	GLN	A	353	33.757	57.947	29.491	1.00	12.99	A
	ATOM	2687	CA	GLN	A	353	33.367	56.888	28.569	1.00	12.34	A
40	ATOM	2688	CB	GLN	A	353	33.887	57.187	27.154	1.00	11.41	A
	ATOM	2689	CG	GLN	A	353	33.348	58.484	26.546	1.00	11.76	A
	ATOM	2690	CD	GLN	A	353	31.900	58.381	26.080	1.00	11.91	A
	ATOM	2691	OE1	GLN	A	353	31.080	57.703	26.698	1.00	12.30	A
	ATOM	2692	NE2	GLN	A	353	31.578	59.072	24.991	1.00	11.88	A
45	ATOM	2693	C	GLN	A	353	33.890	55.528	29.042	1.00	12.28	A
	ATOM	2694	O	GLN	A	353	33.130	54.561	29.132	1.00	12.59	A
	ATOM	2695	N	ARG	A	354	35.179	55.455	29.365	1.00	11.64	A
	ATOM	2696	CA	ARG	A	354	35.775	54.192	29.799	1.00	12.41	A
	ATOM	2697	CB	ARG	A	354	37.286	54.340	29.993	1.00	12.29	A
50	ATOM	2698	CG	ARG	A	354	37.955	53.065	30.508	1.00	12.77	A
	ATOM	2699	CD	ARG	A	354	39.456	53.247	30.716	1.00	14.15	A
	ATOM	2700	NE	ARG	A	354	39.768	54.280	31.702	1.00	15.21	A
	ATOM	2701	CZ	ARG	A	354	39.593	54.156	33.016	1.00	15.91	A
	ATOM	2702	NH1	ARG	A	354	39.104	53.032	33.526	1.00	16.33	A
55	ATOM	2703	NH2	ARG	A	354	39.912	55.158	33.824	1.00	16.46	A
	ATOM	2704	C	ARG	A	354	35.183	53.595	31.069	1.00	12.83	A
	ATOM	2705	O	ARG	A	354	34.817	52.422	31.089	1.00	12.74	A
	ATOM	2706	N	VAL	A	355	35.102	54.395	32.128	1.00	12.88	A
	ATOM	2707	CA	VAL	A	355	34.577	53.912	33.401	1.00	13.28	A

5	ATOM	2708	CB	VAL	A	355	34.650	55.009	34.485	1.00	13.60	A
	ATOM	2709	CG1	VAL	A	355	34.053	54.498	35.789	1.00	16.28	A
	ATOM	2710	CG2	VAL	A	355	36.100	55.418	34.706	1.00	14.36	A
	ATOM	2711	C	VAL	A	355	33.146	53.399	33.313	1.00	12.98	A
	ATOM	2712	O	VAL	A	355	32.836	52.322	33.826	1.00	13.34	A
10	ATOM	2713	N	ASN	A	356	32.270	54.162	32.670	1.00	13.08	A
	ATOM	2714	CA	ASN	A	356	30.886	53.740	32.550	1.00	12.48	A
	ATOM	2715	CB	ASN	A	356	30.035	54.877	31.990	1.00	12.67	A
	ATOM	2716	CG	ASN	A	356	29.735	55.928	33.036	1.00	13.47	A
	ATOM	2717	OD1	ASN	A	356	29.056	55.647	34.029	1.00	13.87	A
15	ATOM	2718	ND2	ASN	A	356	30.250	57.138	32.835	1.00	13.69	A
	ATOM	2719	C	ASN	A	356	30.751	52.472	31.716	1.00	12.85	A
	ATOM	2720	O	ASN	A	356	29.980	51.576	32.066	1.00	12.64	A
	ATOM	2721	N	TYR	A	357	31.504	52.370	30.627	1.00	12.12	A
	ATOM	2722	CA	TYR	A	357	31.415	51.162	29.823	1.00	12.64	A
20	ATOM	2723	CB	TYR	A	357	32.072	51.358	28.451	1.00	12.21	A
	ATOM	2724	CG	TYR	A	357	31.083	51.882	27.439	1.00	11.70	A
	ATOM	2725	CD1	TYR	A	357	30.894	53.251	27.261	1.00	11.24	A
	ATOM	2726	CE1	TYR	A	357	29.917	53.736	26.393	1.00	11.52	A
	ATOM	2727	CD2	TYR	A	357	30.273	51.004	26.718	1.00	12.23	A
25	ATOM	2728	CE2	TYR	A	357	29.291	51.477	25.850	1.00	12.04	A
	ATOM	2729	CZ	TYR	A	357	29.118	52.842	25.693	1.00	11.95	A
	ATOM	2730	OH	TYR	A	357	28.142	53.306	24.847	1.00	12.56	A
	ATOM	2731	C	TYR	A	357	32.015	49.970	30.558	1.00	12.74	A
	ATOM	2732	O	TYR	A	357	31.524	48.848	30.430	1.00	12.97	A
30	ATOM	2733	N	GLU	A	358	33.064	50.206	31.341	1.00	13.29	A
	ATOM	2734	CA	GLU	A	358	33.669	49.118	32.104	1.00	13.40	A
	ATOM	2735	CB	GLU	A	358	34.871	49.612	32.910	1.00	15.05	A
	ATOM	2736	CG	GLU	A	358	36.138	49.838	32.092	1.00	16.80	A
	ATOM	2737	CD	GLU	A	358	37.310	50.270	32.956	1.00	18.32	A
35	ATOM	2738	OE1	GLU	A	358	37.115	50.453	34.176	1.00	20.90	A
	ATOM	2739	OE2	GLU	A	358	38.426	50.430	32.421	1.00	18.81	A
	ATOM	2740	C	GLU	A	358	32.631	48.526	33.059	1.00	13.69	A
	ATOM	2741	O	GLU	A	358	32.554	47.312	33.221	1.00	13.52	A
	ATOM	2742	N	ARG	A	359	31.833	49.387	33.686	1.00	13.66	A
40	ATOM	2743	CA	ARG	A	359	30.804	48.920	34.616	1.00	14.36	A
	ATOM	2744	CB	ARG	A	359	30.150	50.103	35.327	1.00	14.85	A
	ATOM	2745	CG	ARG	A	359	31.061	50.815	36.303	1.00	17.92	A
	ATOM	2746	CD	ARG	A	359	30.433	52.125	36.740	1.00	20.12	A
	ATOM	2747	NE	ARG	A	359	31.315	52.896	37.608	1.00	22.12	A
45	ATOM	2748	CZ	ARG	A	359	31.333	54.224	37.653	1.00	23.24	A
	ATOM	2749	NH1	ARG	A	359	30.516	54.926	36.874	1.00	23.08	A
	ATOM	2750	NH2	ARG	A	359	32.168	54.850	38.473	1.00	24.71	A
	ATOM	2751	C	ARG	A	359	29.737	48.108	33.893	1.00	13.89	A
	ATOM	2752	O	ARG	A	359	29.218	47.130	34.432	1.00	14.23	A
50	ATOM	2753	N	LEU	A	360	29.406	48.517	32.672	1.00	13.60	A
	ATOM	2754	CA	LEU	A	360	28.410	47.803	31.886	1.00	13.35	A
	ATOM	2755	CB	LEU	A	360	28.031	48.621	30.645	1.00	12.99	A
	ATOM	2756	CG	LEU	A	360	27.200	49.878	30.934	1.00	13.00	A
	ATOM	2757	CD1	LEU	A	360	27.222	50.806	29.731	1.00	14.39	A
55	ATOM	2758	CD2	LEU	A	360	25.771	49.481	31.276	1.00	14.37	A
	ATOM	2759	C	LEU	A	360	28.945	46.431	31.480	1.00	13.93	A
	ATOM	2760	O	LEU	A	360	28.239	45.430	31.585	1.00	14.58	A
	ATOM	2761	N	PHE	A	361	30.198	46.385	31.032	1.00	13.62	A
	ATOM	2762	CA	PHE	A	361	30.825	45.130	30.618	1.00	13.96	A

5	ATOM	2763	CB	PHE	A	361	32.254	45.375	30.115	1.00	13.34	A
	ATOM	2764	CG	PHE	A	361	32.338	46.176	28.843	1.00	12.91	A
	ATOM	2765	CD1	PHE	A	361	33.535	46.793	28.485	1.00	13.34	A
	ATOM	2766	CD2	PHE	A	361	31.238	46.310	28.002	1.00	12.77	A
	ATOM	2767	CE1	PHE	A	361	33.636	47.537	27.307	1.00	13.11	A
	ATOM	2768	CE2	PHE	A	361	31.329	47.052	26.819	1.00	12.47	A
	ATOM	2769	CZ	PHE	A	361	32.531	47.665	26.474	1.00	12.92	A
	ATOM	2770	C	PHE	A	361	30.889	44.134	31.774	1.00	14.49	A
10	ATOM	2771	O	PHE	A	361	30.559	42.959	31.614	1.00	14.15	A
	ATOM	2772	N	GLU	A	362	31.329	44.601	32.939	1.00	15.28	A
	ATOM	2773	CA	GLU	A	362	31.441	43.712	34.089	1.00	15.96	A
	ATOM	2774	CB	GLU	A	362	31.969	44.459	35.316	1.00	18.25	A
15	ATOM	2775	CG	GLU	A	362	32.329	43.518	36.464	1.00	22.03	A
	ATOM	2776	CD	GLU	A	362	32.708	44.244	37.740	1.00	24.32	A
	ATOM	2777	OE1	GLU	A	362	33.483	45.218	37.667	1.00	25.76	A
	ATOM	2778	OE2	GLU	A	362	32.238	43.829	38.821	1.00	26.40	A
	ATOM	2779	C	GLU	A	362	30.095	43.084	34.427	1.00	15.98	A
20	ATOM	2780	O	GLU	A	362	30.010	41.886	34.691	1.00	16.22	A
	ATOM	2781	N	HIS	A	363	29.044	43.894	34.417	1.00	15.25	A
	ATOM	2782	CA	HIS	A	363	27.717	43.387	34.732	1.00	15.49	A
	ATOM	2783	CB	HIS	A	363	26.727	44.537	34.914	1.00	16.71	A
	ATOM	2784	CG	HIS	A	363	25.345	44.085	35.267	1.00	17.92	A
	ATOM	2785	CD2	HIS	A	363	24.204	44.054	34.539	1.00	18.79	A
25	ATOM	2786	ND1	HIS	A	363	25.034	43.533	36.491	1.00	18.98	A
	ATOM	2787	CE1	HIS	A	363	23.761	43.180	36.502	1.00	18.19	A
	ATOM	2788	NE2	HIS	A	363	23.234	43.484	35.330	1.00	19.23	A
	ATOM	2789	C	HIS	A	363	27.199	42.450	33.650	1.00	15.11	A
30	ATOM	2790	O	HIS	A	363	26.834	41.309	33.925	1.00	15.10	A
	ATOM	2791	N	ILE	A	364	27.168	42.937	32.415	1.00	14.72	A
	ATOM	2792	CA	ILE	A	364	26.679	42.146	31.297	1.00	14.52	A
	ATOM	2793	CB	ILE	A	364	26.810	42.932	29.975	1.00	13.45	A
	ATOM	2794	CG2	ILE	A	364	26.416	42.043	28.795	1.00	13.94	A
	ATOM	2795	CG1	ILE	A	364	25.914	44.172	30.027	1.00	13.32	A
35	ATOM	2796	CD1	ILE	A	364	26.170	45.165	28.912	1.00	13.44	A
	ATOM	2797	C	ILE	A	364	27.388	40.807	31.141	1.00	14.67	A
	ATOM	2798	O	ILE	A	364	26.741	39.769	30.996	1.00	15.31	A
	ATOM	2799	N	ASN	A	365	28.715	40.822	31.175	1.00	15.38	A
	ATOM	2800	CA	ASN	A	365	29.480	39.594	31.005	1.00	15.76	A
40	ATOM	2801	CB	ASN	A	365	30.957	39.917	30.771	1.00	15.37	A
	ATOM	2802	CG	ASN	A	365	31.177	40.768	29.533	1.00	15.04	A
	ATOM	2803	OD1	ASN	A	365	30.276	40.935	28.710	1.00	14.73	A
	ATOM	2804	ND2	ASN	A	365	32.383	41.305	29.393	1.00	13.53	A
	ATOM	2805	C	ASN	A	365	29.348	38.609	32.162	1.00	17.60	A
45	ATOM	2806	O	ASN	A	365	29.662	37.430	32.005	1.00	17.46	A
	ATOM	2807	N	SER	A	366	28.879	39.087	33.313	1.00	19.18	A
	ATOM	2808	CA	SER	A	366	28.717	38.226	34.484	1.00	21.16	A
	ATOM	2809	CB	SER	A	366	29.114	38.976	35.761	1.00	21.81	A
50	ATOM	2810	OG	SER	A	366	28.220	40.039	36.033	1.00	22.86	A
	ATOM	2811	C	SER	A	366	27.287	37.714	34.622	1.00	22.10	A
	ATOM	2812	O	SER	A	366	27.020	36.810	35.414	1.00	22.66	A
	ATOM	2813	N	GLN	A	367	26.373	38.299	33.854	1.00	23.09	A
	ATOM	2814	CA	GLN	A	367	24.968	37.903	33.877	1.00	24.10	A
	ATOM	2815	CB	GLN	A	367	24.064	39.132	33.749	1.00	25.62	A
55	ATOM	2816	CG	GLN	A	367	24.086	40.044	34.963	1.00	28.14	A
	ATOM	2817	CD	GLN	A	367	23.515	39.374	36.195	1.00	29.20	A

5	ATOM	2818	OE1	GLN	A	367	22.337	39.015	36.229	1.00	30.22	A
	ATOM	2819	NE2	GLN	A	367	24.348	39.197	37.215	1.00	30.01	A
	ATOM	2820	C	GLN	A	367	24.693	36.942	32.726	1.00	23.83	A
	ATOM	2821	O	GLN	A	367	24.413	37.363	31.604	1.00	23.81	A
	ATOM	2822	N	ALA	A	368	24.765	35.649	33.019	1.00	23.74	A
10	ATOM	2823	CA	ALA	A	368	24.549	34.608	32.020	1.00	23.29	A
	ATOM	2824	CB	ALA	A	368	24.533	33.244	32.700	1.00	23.52	A
	ATOM	2825	C	ALA	A	368	23.293	34.771	31.165	1.00	23.34	A
	ATOM	2826	O	ALA	A	368	23.315	34.476	29.970	1.00	22.74	A
	ATOM	2827	N	HIS	A	369	22.202	35.238	31.767	1.00	23.07	A
15	ATOM	2828	CA	HIS	A	369	20.948	35.400	31.036	1.00	22.88	A
	ATOM	2829	CB	HIS	A	369	19.854	35.924	31.977	1.00	24.69	A
	ATOM	2830	CG	HIS	A	369	20.074	37.327	32.448	1.00	25.89	A
	ATOM	2831	CD2	HIS	A	369	20.553	37.810	33.619	1.00	26.56	A
	ATOM	2832	ND1	HIS	A	369	19.795	38.427	31.666	1.00	26.84	A
20	ATOM	2833	CE1	HIS	A	369	20.090	39.527	32.335	1.00	26.51	A
	ATOM	2834	NE2	HIS	A	369	20.553	39.180	33.523	1.00	27.03	A
	ATOM	2835	C	HIS	A	369	21.064	36.299	29.803	1.00	21.99	A
	ATOM	2836	O	HIS	A	369	20.220	36.245	28.908	1.00	22.01	A
	ATOM	2837	N	PHE	A	370	22.110	37.119	29.755	1.00	21.21	A
25	ATOM	2838	CA	PHE	A	370	22.329	38.006	28.615	1.00	19.78	A
	ATOM	2839	CB	PHE	A	370	23.266	39.156	28.998	1.00	21.09	A
	ATOM	2840	CG	PHE	A	370	22.592	40.279	29.736	1.00	21.42	A
	ATOM	2841	CD1	PHE	A	370	23.168	40.813	30.883	1.00	22.09	A
	ATOM	2842	CD2	PHE	A	370	21.401	40.826	29.267	1.00	22.35	A
30	ATOM	2843	CE1	PHE	A	370	22.571	41.879	31.553	1.00	22.54	A
	ATOM	2844	CE2	PHE	A	370	20.795	41.894	29.931	1.00	22.87	A
	ATOM	2845	CZ	PHE	A	370	21.384	42.420	31.076	1.00	22.18	A
	ATOM	2846	C	PHE	A	370	22.953	37.235	27.456	1.00	18.22	A
	ATOM	2847	O	PHE	A	370	22.673	37.515	26.288	1.00	17.08	A
35	ATOM	2848	N	ASN	A	371	23.802	36.268	27.791	1.00	16.98	A
	ATOM	2849	CA	ASN	A	371	24.498	35.463	26.794	1.00	15.64	A
	ATOM	2850	CB	ASN	A	371	23.500	34.613	26.004	1.00	16.15	A
	ATOM	2851	CG	ASN	A	371	22.826	33.565	26.870	1.00	16.71	A
	ATOM	2852	OD1	ASN	A	371	23.483	32.668	27.401	1.00	18.32	A
40	ATOM	2853	ND2	ASN	A	371	21.513	33.679	27.024	1.00	17.75	A
	ATOM	2854	C	ASN	A	371	25.281	36.383	25.865	1.00	15.24	A
	ATOM	2855	O	ASN	A	371	25.259	36.232	24.640	1.00	15.41	A
	ATOM	2856	N	VAL	A	372	25.973	37.340	26.478	1.00	14.72	A
	ATOM	2857	CA	VAL	A	372	26.784	38.318	25.763	1.00	14.11	A
45	ATOM	2858	CB	VAL	A	372	26.121	39.723	25.792	1.00	14.33	A
	ATOM	2859	CG1	VAL	A	372	27.095	40.780	25.264	1.00	13.94	A
	ATOM	2860	CG2	VAL	A	372	24.847	39.720	24.964	1.00	14.60	A
	ATOM	2861	C	VAL	A	372	28.161	38.447	26.407	1.00	14.50	A
	ATOM	2862	O	VAL	A	372	28.302	38.339	27.624	1.00	14.25	A
50	ATOM	2863	N	GLN	A	373	29.172	38.661	25.573	1.00	14.04	A
	ATOM	2864	CA	GLN	A	373	30.539	38.877	26.031	1.00	14.11	A
	ATOM	2865	CB	GLN	A	373	31.452	37.713	25.631	1.00	14.92	A
	ATOM	2866	CG	GLN	A	373	32.933	37.914	25.971	1.00	16.67	A
	ATOM	2867	CD	GLN	A	373	33.172	38.273	27.432	1.00	17.93	A
55	ATOM	2868	OE1	GLN	A	373	32.509	37.754	28.329	1.00	19.36	A
	ATOM	2869	NE2	GLN	A	373	34.136	39.154	27.675	1.00	17.77	A
	ATOM	2870	C	GLN	A	373	30.946	40.155	25.307	1.00	13.61	A
	ATOM	2871	O	GLN	A	373	31.222	40.141	24.106	1.00	13.94	A
	ATOM	2872	N	ALA	A	374	30.950	41.263	26.040	1.00	12.65	A

5	ATOM	2873	CA	ALA	A	374	31.281	42.558	25.466	1.00	12.16	A
	ATOM	2874	CB	ALA	A	374	30.183	43.553	25.800	1.00	11.40	A
	ATOM	2875	C	ALA	A	374	32.623	43.085	25.949	1.00	12.23	A
	ATOM	2876	O	ALA	A	374	33.012	42.869	27.094	1.00	11.95	A
	ATOM	2877	N	GLN	A	375	33.323	43.796	25.074	1.00	11.84	A
10	ATOM	2878	CA	GLN	A	375	34.619	44.356	25.432	1.00	12.49	A
	ATOM	2879	CB	GLN	A	375	35.685	43.258	25.461	1.00	14.15	A
	ATOM	2880	CG	GLN	A	375	35.804	42.468	24.160	1.00	17.09	A
	ATOM	2881	CD	GLN	A	375	34.957	41.211	24.165	1.00	19.74	A
	ATOM	2882	OE1	GLN	A	375	35.187	40.302	24.964	1.00	21.17	A
15	ATOM	2883	NE2	GLN	A	375	33.971	41.151	23.274	1.00	20.69	A
	ATOM	2884	C	GLN	A	375	35.059	45.424	24.448	1.00	11.84	A
	ATOM	2885	O	GLN	A	375	34.518	45.526	23.348	1.00	11.73	A
	ATOM	2886	N	PHE	A	376	36.032	46.232	24.859	1.00	11.18	A
	ATOM	2887	CA	PHE	A	376	36.579	47.245	23.969	1.00	10.74	A
20	ATOM	2888	CB	PHE	A	376	37.515	48.197	24.720	1.00	10.14	A
	ATOM	2889	CG	PHE	A	376	36.814	49.112	25.681	1.00	10.91	A
	ATOM	2890	CD1	PHE	A	376	37.163	49.120	27.028	1.00	11.12	A
	ATOM	2891	CD2	PHE	A	376	35.807	49.971	25.243	1.00	11.24	A
	ATOM	2892	CE1	PHE	A	376	36.518	49.970	27.927	1.00	11.39	A
25	ATOM	2893	CE2	PHE	A	376	35.158	50.825	26.138	1.00	11.60	A
	ATOM	2894	CZ	PHE	A	376	35.516	50.821	27.482	1.00	11.57	A
	ATOM	2895	C	PHE	A	376	37.386	46.450	22.954	1.00	11.25	A
	ATOM	2896	O	PHE	A	376	38.015	45.448	23.297	1.00	10.76	A
	ATOM	2897	N	GLY	A	377	37.364	46.882	21.702	1.00	11.05	A
30	ATOM	2898	CA	GLY	A	377	38.121	46.171	20.693	1.00	10.92	A
	ATOM	2899	C	GLY	A	377	38.524	47.092	19.565	1.00	10.93	A
	ATOM	2900	O	GLY	A	377	38.196	48.277	19.577	1.00	10.75	A
	ATOM	2901	N	THR	A	378	39.257	46.549	18.600	1.00	10.49	A
	ATOM	2902	CA	THR	A	378	39.674	47.333	17.447	1.00	11.19	A
35	ATOM	2903	CB	THR	A	378	41.187	47.214	17.182	1.00	11.98	A
	ATOM	2904	OG1	THR	A	378	41.508	45.860	16.845	1.00	11.89	A
	ATOM	2905	CG2	THR	A	378	41.981	47.640	18.411	1.00	12.75	A
	ATOM	2906	C	THR	A	378	38.924	46.809	16.228	1.00	10.71	A
	ATOM	2907	O	THR	A	378	38.233	45.788	16.296	1.00	10.80	A
40	ATOM	2908	N	LEU	A	379	39.059	47.509	15.111	1.00	10.53	A
	ATOM	2909	CA	LEU	A	379	38.386	47.101	13.888	1.00	9.83	A
	ATOM	2910	CB	LEU	A	379	38.605	48.160	12.803	1.00	9.72	A
	ATOM	2911	CG	LEU	A	379	37.862	47.943	11.483	1.00	9.77	A
	ATOM	2912	CD1	LEU	A	379	36.357	47.930	11.748	1.00	10.37	A
45	ATOM	2913	CD2	LEU	A	379	38.227	49.050	10.493	1.00	10.95	A
	ATOM	2914	C	LEU	A	379	38.879	45.738	13.399	1.00	10.38	A
	ATOM	2915	O	LEU	A	379	38.083	44.878	13.017	1.00	10.10	A
	ATOM	2916	N	GLN	A	380	40.193	45.538	13.415	1.00	10.27	A
	ATOM	2917	CA	GLN	A	380	40.764	44.274	12.964	1.00	10.67	A
50	ATOM	2918	CB	GLN	A	380	42.292	44.339	13.003	1.00	11.35	A
	ATOM	2919	CG	GLN	A	380	42.975	43.119	12.410	1.00	14.06	A
	ATOM	2920	CD	GLN	A	380	42.611	42.913	10.957	1.00	15.62	A
	ATOM	2921	OE1	GLN	A	380	42.678	43.846	10.155	1.00	16.75	A
	ATOM	2922	NE2	GLN	A	380	42.228	41.687	10.604	1.00	17.08	A
55	ATOM	2923	C	GLN	A	380	40.262	43.114	13.825	1.00	10.55	A
	ATOM	2924	O	GLN	A	380	40.008	42.021	13.316	1.00	11.04	A
	ATOM	2925	N	GLU	A	381	40.117	43.347	15.127	1.00	10.91	A
	ATOM	2926	CA	GLU	A	381	39.633	42.298	16.016	1.00	11.75	A
	ATOM	2927	CB	GLU	A	381	39.657	42.768	17.473	1.00	13.13	A

5	ATOM	2928	CG	GLU	A	381	41.063	43.061	17.981	1.00	16.73	A
	ATOM	2929	CD	GLU	A	381	41.108	43.354	19.465	1.00	19.29	A
	ATOM	2930	OE1	GLU	A	381	40.266	44.141	19.941	1.00	18.94	A
	ATOM	2931	OE2	GLU	A	381	41.997	42.805	20.154	1.00	22.67	A
	ATOM	2932	C	GLU	A	381	38.219	41.884	15.621	1.00	10.96	A
	ATOM	2933	O	GLU	A	381	37.880	40.706	15.661	1.00	12.22	A
	ATOM	2934	N	TYR	A	382	37.397	42.857	15.244	1.00	10.23	A
	ATOM	2935	CA	TYR	A	382	36.037	42.562	14.821	1.00	9.86	A
	ATOM	2936	CB	TYR	A	382	35.279	43.847	14.488	1.00	10.34	A
	ATOM	2937	CG	TYR	A	382	33.967	43.581	13.784	1.00	9.83	A
10	ATOM	2938	CD1	TYR	A	382	32.891	43.011	14.467	1.00	9.54	A
	ATOM	2939	CE1	TYR	A	382	31.702	42.700	13.809	1.00	9.35	A
	ATOM	2940	CD2	TYR	A	382	33.820	43.839	12.418	1.00	10.35	A
	ATOM	2941	CE2	TYR	A	382	32.634	43.528	11.750	1.00	10.43	A
15	ATOM	2942	CZ	TYR	A	382	31.581	42.957	12.453	1.00	10.11	A
	ATOM	2943	OH	TYR	A	382	30.410	42.625	11.805	1.00	10.25	A
	ATOM	2944	C	TYR	A	382	36.061	41.676	13.581	1.00	10.29	A
	ATOM	2945	O	TYR	A	382	35.438	40.617	13.546	1.00	10.12	A
20	ATOM	2946	N	PHE	A	383	36.775	42.120	12.553	1.00	9.08	A
	ATOM	2947	CA	PHE	A	383	36.852	41.353	11.320	1.00	9.53	A
	ATOM	2948	CB	PHE	A	383	37.657	42.121	10.268	1.00	9.49	A
	ATOM	2949	CG	PHE	A	383	36.898	43.262	9.638	1.00	9.73	A
25	ATOM	2950	CD1	PHE	A	383	37.406	44.555	9.676	1.00	9.70	A
	ATOM	2951	CD2	PHE	A	383	35.678	43.038	9.003	1.00	10.22	A
	ATOM	2952	CE1	PHE	A	383	36.709	45.613	9.091	1.00	10.19	A
	ATOM	2953	CE2	PHE	A	383	34.971	44.088	8.415	1.00	11.04	A
	ATOM	2954	CZ	PHE	A	383	35.490	45.378	8.459	1.00	11.28	A
	ATOM	2955	C	PHE	A	383	37.441	39.961	11.528	1.00	9.84	A
30	ATOM	2956	O	PHE	A	383	36.971	38.993	10.926	1.00	10.29	A
	ATOM	2957	N	ASP	A	384	38.466	39.851	12.370	1.00	10.93	A
	ATOM	2958	CA	ASP	A	384	39.067	38.543	12.625	1.00	12.16	A
	ATOM	2959	CB	ASP	A	384	40.239	38.655	13.608	1.00	13.63	A
35	ATOM	2960	CG	ASP	A	384	41.482	39.262	12.980	1.00	14.89	A
	ATOM	2961	OD1	ASP	A	384	41.572	39.309	11.735	1.00	16.13	A
	ATOM	2962	OD2	ASP	A	384	42.382	39.677	13.739	1.00	17.90	A
	ATOM	2963	C	ASP	A	384	38.015	37.592	13.196	1.00	11.66	A
	ATOM	2964	O	ASP	A	384	37.913	36.438	12.777	1.00	11.92	A
	ATOM	2965	N	ALA	A	385	37.224	38.086	14.147	1.00	11.48	A
40	ATOM	2966	CA	ALA	A	385	36.181	37.280	14.771	1.00	11.44	A
	ATOM	2967	CB	ALA	A	385	35.576	38.037	15.957	1.00	12.50	A
	ATOM	2968	C	ALA	A	385	35.094	36.905	13.765	1.00	11.73	A
	ATOM	2969	O	ALA	A	385	34.608	35.777	13.758	1.00	11.52	A
45	ATOM	2970	N	VAL	A	386	34.714	37.851	12.912	1.00	11.15	A
	ATOM	2971	CA	VAL	A	386	33.694	37.585	11.904	1.00	11.93	A
	ATOM	2972	CB	VAL	A	386	33.425	38.838	11.042	1.00	11.54	A
	ATOM	2973	CG1	VAL	A	386	32.580	38.471	9.826	1.00	12.39	A
	ATOM	2974	CG2	VAL	A	386	32.719	39.887	11.874	1.00	12.20	A
	ATOM	2975	C	VAL	A	386	34.114	36.440	10.986	1.00	12.29	A
50	ATOM	2976	O	VAL	A	386	33.330	35.530	10.706	1.00	12.49	A
	ATOM	2977	N	HIS	A	387	35.353	36.483	10.513	1.00	12.25	A
	ATOM	2978	CA	HIS	A	387	35.832	35.440	9.619	1.00	12.83	A
	ATOM	2979	CB	HIS	A	387	37.092	35.918	8.899	1.00	12.37	A
55	ATOM	2980	CG	HIS	A	387	36.827	37.039	7.942	1.00	13.26	A
	ATOM	2981	CD2	HIS	A	387	37.280	38.314	7.909	1.00	13.42	A
	ATOM	2982	ND1	HIS	A	387	35.950	36.916	6.886	1.00	14.23	A

5	ATOM	2983	CE1	HIS	A	387	35.871	38.069	6.245	1.00	14.01	A
	ATOM	2984	NE2	HIS	A	387	36.668	38.934	6.846	1.00	13.21	A
	ATOM	2985	C	HIS	A	387	36.049	34.111	10.331	1.00	13.93	A
	ATOM	2986	O	HIS	A	387	35.995	33.050	9.708	1.00	13.04	A
	ATOM	2987	N	GLN	A	388	36.281	34.166	11.639	1.00	14.93	A
	ATOM	2988	CA	GLN	A	388	36.446	32.944	12.413	1.00	17.07	A
	ATOM	2989	CB	GLN	A	388	36.914	33.272	13.833	1.00	18.68	A
	ATOM	2990	CG	GLN	A	388	38.403	33.574	13.937	1.00	22.09	A
	ATOM	2991	CD	GLN	A	388	38.764	34.330	15.206	1.00	24.01	A
	ATOM	2992	OE1	GLN	A	388	38.272	34.020	16.291	1.00	26.13	A
10	ATOM	2993	NE2	GLN	A	388	39.637	35.324	15.075	1.00	25.42	A
	ATOM	2994	C	GLN	A	388	35.081	32.260	12.443	1.00	17.56	A
	ATOM	2995	O	GLN	A	388	34.983	31.039	12.342	1.00	17.57	A
	ATOM	2996	N	ALA	A	389	34.027	33.063	12.566	1.00	18.15	A
15	ATOM	2997	CA	ALA	A	389	32.663	32.543	12.594	1.00	19.02	A
	ATOM	2998	CB	ALA	A	389	31.688	33.647	12.990	1.00	18.44	A
	ATOM	2999	C	ALA	A	389	32.310	31.996	11.215	1.00	20.03	A
	ATOM	3000	O	ALA	A	389	31.630	30.976	11.093	1.00	20.84	A
20	ATOM	3001	N	GLU	A	390	32.776	32.688	10.178	1.00	20.86	A
	ATOM	3002	CA	GLU	A	390	32.535	32.278	8.800	1.00	22.27	A
	ATOM	3003	CB	GLU	A	390	33.109	33.326	7.839	1.00	21.67	A
	ATOM	3004	CG	GLU	A	390	33.223	32.874	6.390	1.00	22.55	A
25	ATOM	3005	CD	GLU	A	390	33.774	33.964	5.491	1.00	22.57	A
	ATOM	3006	OE1	GLU	A	390	34.653	34.722	5.953	1.00	22.88	A
	ATOM	3007	OE2	GLU	A	390	33.341	34.057	4.323	1.00	23.67	A
	ATOM	3008	C	GLU	A	390	33.181	30.920	8.544	1.00	23.75	A
30	ATOM	3009	O	GLU	A	390	32.563	30.028	7.960	1.00	23.58	A
	ATOM	3010	N	ARG	A	391	34.426	30.769	8.984	1.00	25.19	A
	ATOM	3011	CA	ARG	A	391	35.147	29.514	8.810	1.00	27.32	A
	ATOM	3012	CB	ARG	A	391	36.609	29.675	9.233	1.00	28.48	A
35	ATOM	3013	CG	ARG	A	391	37.457	30.466	8.248	1.00	30.71	A
	ATOM	3014	CD	ARG	A	391	38.898	30.573	8.723	1.00	32.35	A
	ATOM	3015	NE	ARG	A	391	39.021	31.418	9.907	1.00	34.70	A
	ATOM	3016	CZ	ARG	A	391	40.147	31.591	10.591	1.00	35.47	A
40	ATOM	3017	NH1	ARG	A	391	41.259	30.973	10.212	1.00	36.35	A
	ATOM	3018	NH2	ARG	A	391	40.165	32.386	11.652	1.00	36.12	A
	ATOM	3019	C	ARG	A	391	34.488	28.403	9.621	1.00	27.87	A
	ATOM	3020	O	ARG	A	391	34.553	27.230	9.250	1.00	28.52	A
45	ATOM	3021	N	ALA	A	392	33.855	28.774	10.729	1.00	28.42	A
	ATOM	3022	CA	ALA	A	392	33.174	27.798	11.572	1.00	29.34	A
	ATOM	3023	CB	ALA	A	392	32.808	28.423	12.913	1.00	29.39	A
	ATOM	3024	C	ALA	A	392	31.918	27.334	10.843	1.00	29.94	A
50	ATOM	3025	O	ALA	A	392	31.238	26.404	11.278	1.00	30.20	A
	ATOM	3026	N	GLY	A	393	31.621	27.997	9.729	1.00	30.21	A
	ATOM	3027	CA	GLY	A	393	30.459	27.647	8.936	1.00	30.73	A
	ATOM	3028	C	GLY	A	393	29.137	28.156	9.476	1.00	30.90	A
55	ATOM	3029	O	GLY	A	393	28.089	27.583	9.186	1.00	30.72	A
	ATOM	3030	N	GLN	A	394	29.167	29.230	10.258	1.00	31.23	A
	ATOM	3031	CA	GLN	A	394	27.926	29.762	10.803	1.00	31.55	A
	ATOM	3032	CB	GLN	A	394	28.125	30.254	12.243	1.00	32.81	A
55	ATOM	3033	CG	GLN	A	394	28.869	31.566	12.379	1.00	34.09	A
	ATOM	3034	CD	GLN	A	394	28.756	32.150	13.777	1.00	34.34	A
	ATOM	3035	OE1	GLN	A	394	29.246	31.573	14.749	1.00	34.56	A
	ATOM	3036	NE2	GLN	A	394	28.099	33.299	13.883	1.00	33.78	A
	ATOM	3037	C	GLN	A	394	27.373	30.892	9.944	1.00	30.68	A

5	ATOM	3038	O	GLN	A	394	26.308	31.434	10.233	1.00	31.18	A
	ATOM	3039	N	ALA	A	395	28.091	31.242	8.880	1.00	29.36	A
	ATOM	3040	CA	ALA	A	395	27.644	32.311	7.998	1.00	28.11	A
	ATOM	3041	CB	ALA	A	395	27.939	33.667	8.639	1.00	28.51	A
	ATOM	3042	C	ALA	A	395	28.263	32.253	6.607	1.00	27.07	A
10	ATOM	3043	O	ALA	A	395	29.413	31.849	6.434	1.00	26.55	A
	ATOM	3044	N	GLU	A	396	27.472	32.656	5.618	1.00	26.11	A
	ATOM	3045	CA	GLU	A	396	27.902	32.701	4.227	1.00	25.01	A
	ATOM	3046	CB	GLU	A	396	27.081	31.731	3.372	1.00	28.19	A
	ATOM	3047	CG	GLU	A	396	26.403	30.616	4.156	1.00	32.27	A
15	ATOM	3048	CD	GLU	A	396	25.087	31.055	4.780	1.00	34.46	A
	ATOM	3049	OE1	GLU	A	396	25.079	32.035	5.558	1.00	35.47	A
	ATOM	3050	OE2	GLU	A	396	24.054	30.414	4.491	1.00	35.90	A
	ATOM	3051	C	GLU	A	396	27.610	34.134	3.804	1.00	22.25	A
	ATOM	3052	O	GLU	A	396	26.559	34.675	4.147	1.00	22.54	A
20	ATOM	3053	N	PHE	A	397	28.528	34.756	3.075	1.00	18.45	A
	ATOM	3054	CA	PHE	A	397	28.313	36.134	2.661	1.00	15.02	A
	ATOM	3055	CB	PHE	A	397	29.530	36.988	3.024	1.00	14.03	A
	ATOM	3056	CG	PHE	A	397	29.830	37.014	4.493	1.00	11.87	A
	ATOM	3057	CD1	PHE	A	397	30.916	36.315	5.008	1.00	12.64	A
25	ATOM	3058	CD2	PHE	A	397	29.010	37.718	5.367	1.00	11.17	A
	ATOM	3059	CE1	PHE	A	397	31.181	36.318	6.379	1.00	12.60	A
	ATOM	3060	CE2	PHE	A	397	29.267	37.725	6.737	1.00	11.98	A
	ATOM	3061	CZ	PHE	A	397	30.354	37.024	7.240	1.00	12.05	A
	ATOM	3062	C	PHE	A	397	27.998	36.295	1.181	1.00	13.50	A
30	ATOM	3063	O	PHE	A	397	28.549	35.592	0.334	1.00	13.62	A
	ATOM	3064	N	PRO	A	398	27.090	37.227	0.857	1.00	11.54	A
	ATOM	3065	CD	PRO	A	398	26.315	38.064	1.791	1.00	11.74	A
	ATOM	3066	CA	PRO	A	398	26.694	37.491	-0.526	1.00	11.19	A
	ATOM	3067	CB	PRO	A	398	25.417	38.302	-0.361	1.00	11.18	A
35	ATOM	3068	CG	PRO	A	398	25.711	39.107	0.873	1.00	10.73	A
	ATOM	3069	C	PRO	A	398	27.765	38.267	-1.284	1.00	10.60	A
	ATOM	3070	O	PRO	A	398	28.606	38.941	-0.684	1.00	10.78	A
	ATOM	3071	N	THR	A	399	27.729	38.150	-2.604	1.00	10.12	A
	ATOM	3072	CA	THR	A	399	28.663	38.849	-3.473	1.00	9.51	A
40	ATOM	3073	CB	THR	A	399	29.072	37.968	-4.661	1.00	9.66	A
	ATOM	3074	OG1	THR	A	399	27.897	37.527	-5.358	1.00	11.62	A
	ATOM	3075	CG2	THR	A	399	29.846	36.754	-4.165	1.00	10.14	A
	ATOM	3076	C	THR	A	399	27.932	40.085	-3.980	1.00	9.58	A
	ATOM	3077	O	THR	A	399	26.713	40.071	-4.128	1.00	9.11	A
45	ATOM	3078	N	LEU	A	400	28.671	41.155	-4.245	1.00	8.68	A
	ATOM	3079	CA	LEU	A	400	28.042	42.383	-4.705	1.00	8.59	A
	ATOM	3080	CB	LEU	A	400	27.656	43.250	-3.492	1.00	9.30	A
	ATOM	3081	CG	LEU	A	400	27.037	44.646	-3.685	1.00	8.82	A
	ATOM	3082	CD1	LEU	A	400	26.267	45.023	-2.424	1.00	10.19	A
50	ATOM	3083	CD2	LEU	A	400	28.113	45.690	-3.995	1.00	9.06	A
	ATOM	3084	C	LEU	A	400	28.958	43.169	-5.618	1.00	8.59	A
	ATOM	3085	O	LEU	A	400	30.178	43.136	-5.467	1.00	8.00	A
	ATOM	3086	N	SER	A	401	28.359	43.857	-6.584	1.00	8.67	A
	ATOM	3087	CA	SER	A	401	29.117	44.717	-7.481	1.00	8.41	A
55	ATOM	3088	CB	SER	A	401	29.371	44.052	-8.838	1.00	9.45	A
	ATOM	3089	OG	SER	A	401	28.244	44.125	-9.694	1.00	9.90	A
	ATOM	3090	C	SER	A	401	28.281	45.975	-7.661	1.00	8.49	A
	ATOM	3091	O	SER	A	401	27.063	45.955	-7.462	1.00	7.41	A
	ATOM	3092	N	GLY	A	402	28.943	47.069	-8.021	1.00	7.28	A

5	ATOM	3093	CA	GLY	A	402	28.252	48.332	-8.222	1.00	7.95	A
	ATOM	3094	C	GLY	A	402	28.860	49.410	-7.346	1.00	8.13	A
	ATOM	3095	O	GLY	A	402	29.905	49.190	-6.724	1.00	8.75	A
	ATOM	3096	N	ASP	A	403	28.220	50.575	-7.297	1.00	7.93	A
	ATOM	3097	CA	ASP	A	403	28.720	51.670	-6.473	1.00	8.03	A
10	ATOM	3098	CB	ASP	A	403	29.229	52.815	-7.360	1.00	8.33	A
	ATOM	3099	CG	ASP	A	403	28.112	53.578	-8.037	1.00	10.13	A
	ATOM	3100	OD1	ASP	A	403	26.994	53.039	-8.160	1.00	12.44	A
	ATOM	3101	OD2	ASP	A	403	28.363	54.724	-8.460	1.00	12.35	A
	ATOM	3102	C	ASP	A	403	27.623	52.162	-5.541	1.00	8.91	A
15	ATOM	3103	O	ASP	A	403	26.516	51.609	-5.521	1.00	8.76	A
	ATOM	3104	N	PHE	A	404	27.933	53.192	-4.761	1.00	7.11	A
	ATOM	3105	CA	PHE	A	404	26.967	53.740	-3.827	1.00	7.03	A
	ATOM	3106	CB	PHE	A	404	27.338	53.341	-2.391	1.00	7.25	A
	ATOM	3107	CG	PHE	A	404	27.292	51.852	-2.163	1.00	7.96	A
20	ATOM	3108	CD1	PHE	A	404	28.457	51.092	-2.183	1.00	8.45	A
	ATOM	3109	CD2	PHE	A	404	26.070	51.203	-1.994	1.00	8.79	A
	ATOM	3110	CE1	PHE	A	404	28.407	49.702	-2.042	1.00	8.99	A
	ATOM	3111	CE2	PHE	A	404	26.010	49.813	-1.853	1.00	8.46	A
	ATOM	3112	CZ	PHE	A	404	27.180	49.064	-1.877	1.00	9.11	A
25	ATOM	3113	C	PHE	A	404	26.785	55.247	-3.957	1.00	5.97	A
	ATOM	3114	O	PHE	A	404	26.922	55.998	-2.994	1.00	6.84	A
	ATOM	3115	N	PHE	A	405	26.470	55.664	-5.180	1.00	7.41	A
	ATOM	3116	CA	PHE	A	405	26.190	57.059	-5.512	1.00	8.36	A
	ATOM	3117	CB	PHE	A	405	27.228	57.624	-6.494	1.00	7.18	A
30	ATOM	3118	CG	PHE	A	405	28.618	57.725	-5.930	1.00	7.06	A
	ATOM	3119	CD1	PHE	A	405	29.676	57.062	-6.542	1.00	8.48	A
	ATOM	3120	CD2	PHE	A	405	28.875	58.492	-4.797	1.00	7.69	A
	ATOM	3121	CE1	PHE	A	405	30.975	57.159	-6.033	1.00	7.72	A
	ATOM	3122	CE2	PHE	A	405	30.171	58.595	-4.280	1.00	7.86	A
35	ATOM	3123	CZ	PHE	A	405	31.221	57.926	-4.901	1.00	7.74	A
	ATOM	3124	C	PHE	A	405	24.832	56.989	-6.216	1.00	9.74	A
	ATOM	3125	O	PHE	A	405	24.548	56.000	-6.894	1.00	11.55	A
	ATOM	3126	N	THR	A	406	23.989	58.009	-6.080	1.00	10.20	A
	ATOM	3127	CA	THR	A	406	24.266	59.205	-5.302	1.00	9.22	A
40	ATOM	3128	CB	THR	A	406	23.738	60.449	-6.047	1.00	8.18	A
	ATOM	3129	OG1	THR	A	406	24.579	60.693	-7.179	1.00	10.10	A
	ATOM	3130	CG2	THR	A	406	23.724	61.677	-5.149	1.00	8.41	A
	ATOM	3131	C	THR	A	406	23.638	59.107	-3.918	1.00	9.23	A
	ATOM	3132	O	THR	A	406	22.478	58.721	-3.761	1.00	10.33	A
45	ATOM	3133	N	TYR	A	407	24.433	59.462	-2.918	1.00	9.08	A
	ATOM	3134	CA	TYR	A	407	24.030	59.418	-1.520	1.00	9.23	A
	ATOM	3135	CB	TYR	A	407	25.276	59.650	-0.660	1.00	9.83	A
	ATOM	3136	CG	TYR	A	407	25.047	59.828	0.824	1.00	10.11	A
	ATOM	3137	CD1	TYR	A	407	24.571	58.779	1.614	1.00	9.79	A
50	ATOM	3138	CE1	TYR	A	407	24.448	58.918	2.997	1.00	10.83	A
	ATOM	3139	CD2	TYR	A	407	25.383	61.024	1.453	1.00	9.98	A
	ATOM	3140	CE2	TYR	A	407	25.265	61.175	2.833	1.00	9.66	A
	ATOM	3141	CZ	TYR	A	407	24.802	60.119	3.600	1.00	9.91	A
	ATOM	3142	OH	TYR	A	407	24.732	60.257	4.967	1.00	10.51	A
55	ATOM	3143	C	TYR	A	407	22.954	60.423	-1.129	1.00	10.35	A
	ATOM	3144	O	TYR	A	407	22.947	61.559	-1.593	1.00	10.39	A
	ATOM	3145	N	ALA	A	408	22.043	59.976	-0.272	1.00	10.77	A
	ATOM	3146	CA	ALA	A	408	20.980	60.809	0.279	1.00	10.56	A
	ATOM	3147	CB	ALA	A	408	19.652	60.549	-0.432	1.00	12.09	A

5	ATOM	3148	C	ALA	A	408	20.900	60.360	1.732	1.00	10.90	A
	ATOM	3149	O	ALA	A	408	20.748	59.165	1.999	1.00	10.68	A
	ATOM	3150	N	ASP	A	409	21.031	61.296	2.671	1.00	10.55	A
	ATOM	3151	CA	ASP	A	409	20.971	60.933	4.084	1.00	11.69	A
	ATOM	3152	CB	ASP	A	409	21.946	61.795	4.920	1.00	11.33	A
10	ATOM	3153	CG	ASP	A	409	21.643	63.292	4.869	1.00	10.60	A
	ATOM	3154	OD1	ASP	A	409	21.024	63.770	3.898	1.00	11.47	A
	ATOM	3155	OD2	ASP	A	409	22.065	64.004	5.811	1.00	12.60	A
	ATOM	3156	C	ASP	A	409	19.549	60.987	4.641	1.00	12.81	A
	ATOM	3157	O	ASP	A	409	19.258	60.388	5.680	1.00	14.02	A
15	ATOM	3158	N	ARG	A	410	18.662	61.683	3.935	1.00	13.88	A
	ATOM	3159	CA	ARG	A	410	17.263	61.785	4.343	1.00	15.32	A
	ATOM	3160	CB	ARG	A	410	17.128	62.574	5.652	1.00	17.28	A
	ATOM	3161	CG	ARG	A	410	17.637	64.009	5.620	1.00	20.04	A
	ATOM	3162	CD	ARG	A	410	17.627	64.579	7.035	1.00	23.14	A
20	ATOM	3163	NE	ARG	A	410	18.215	65.913	7.135	1.00	26.24	A
	ATOM	3164	CZ	ARG	A	410	17.598	67.038	6.787	1.00	28.17	A
	ATOM	3165	NH1	ARG	A	410	16.359	67.004	6.310	1.00	28.33	A
	ATOM	3166	NH2	ARG	A	410	18.219	68.201	6.924	1.00	28.66	A
	ATOM	3167	C	ARG	A	410	16.407	62.426	3.256	1.00	15.93	A
25	ATOM	3168	O	ARG	A	410	16.911	63.174	2.416	1.00	15.40	A
	ATOM	3169	N	SER	A	411	15.115	62.110	3.282	1.00	15.97	A
	ATOM	3170	CA	SER	A	411	14.141	62.624	2.320	1.00	16.02	A
	ATOM	3171	CB	SER	A	411	13.602	63.984	2.787	1.00	17.79	A
	ATOM	3172	OG	SER	A	411	14.647	64.906	3.039	1.00	20.12	A
30	ATOM	3173	C	SER	A	411	14.673	62.723	0.892	1.00	15.26	A
	ATOM	3174	O	SER	A	411	15.124	61.725	0.322	1.00	15.04	A
	ATOM	3175	N	ASP	A	412	14.615	63.919	0.313	1.00	13.50	A
	ATOM	3176	CA	ASP	A	412	15.089	64.133	-1.052	1.00	13.01	A
	ATOM	3177	CB	ASP	A	412	14.052	64.937	-1.848	1.00	13.83	A
35	ATOM	3178	CG	ASP	A	412	13.911	66.369	-1.354	1.00	14.01	A
	ATOM	3179	OD1	ASP	A	412	14.388	66.672	-0.241	1.00	13.33	A
	ATOM	3180	OD2	ASP	A	412	13.310	67.196	-2.077	1.00	15.12	A
	ATOM	3181	C	ASP	A	412	16.423	64.871	-1.054	1.00	12.08	A
	ATOM	3182	O	ASP	A	412	16.822	65.439	-2.071	1.00	12.37	A
40	ATOM	3183	N	ASN	A	413	17.108	64.857	0.087	1.00	11.65	A
	ATOM	3184	CA	ASN	A	413	18.393	65.538	0.215	1.00	11.09	A
	ATOM	3185	CB	ASN	A	413	18.703	65.851	1.683	1.00	11.71	A
	ATOM	3186	CG	ASN	A	413	17.804	66.933	2.271	1.00	11.32	A
	ATOM	3187	OD1	ASN	A	413	18.069	67.432	3.364	1.00	12.21	A
45	ATOM	3188	ND2	ASN	A	413	16.742	67.293	1.559	1.00	11.39	A
	ATOM	3189	C	ASN	A	413	19.536	64.709	-0.365	1.00	11.02	A
	ATOM	3190	O	ASN	A	413	20.261	64.039	0.373	1.00	11.48	A
	ATOM	3191	N	TYR	A	414	19.688	64.758	-1.687	1.00	10.66	A
	ATOM	3192	CA	TYR	A	414	20.757	64.029	-2.367	1.00	10.00	A
50	ATOM	3193	CB	TYR	A	414	20.335	63.638	-3.787	1.00	10.30	A
	ATOM	3194	CG	TYR	A	414	19.333	62.505	-3.824	1.00	10.55	A
	ATOM	3195	CD1	TYR	A	414	17.974	62.741	-3.616	1.00	10.75	A
	ATOM	3196	CE1	TYR	A	414	17.055	61.688	-3.606	1.00	10.98	A
	ATOM	3197	CD2	TYR	A	414	19.752	61.191	-4.025	1.00	10.20	A
55	ATOM	3198	CE2	TYR	A	414	18.844	60.134	-4.016	1.00	10.67	A
	ATOM	3199	CZ	TYR	A	414	17.502	60.390	-3.806	1.00	10.80	A
	ATOM	3200	OH	TYR	A	414	16.609	59.340	-3.796	1.00	10.77	A
	ATOM	3201	C	TYR	A	414	22.008	64.899	-2.419	1.00	10.13	A
	ATOM	3202	O	TYR	A	414	21.942	66.075	-2.778	1.00	10.53	A

5	ATOM	3203	N	TRP	A	415	23.142	64.302	-2.072	1.00	9.52	A
	ATOM	3204	CA	TRP	A	415	24.416	65.010	-2.030	1.00	9.26	A
	ATOM	3205	CB	TRP	A	415	25.320	64.366	-0.971	1.00	9.67	A
	ATOM	3206	CG	TRP	A	415	24.786	64.442	0.441	1.00	9.03	A
	ATOM	3207	CD2	TRP	A	415	25.545	64.689	1.632	1.00	9.61	A
10	ATOM	3208	CE2	TRP	A	415	24.650	64.605	2.725	1.00	9.55	A
	ATOM	3209	CE3	TRP	A	415	26.896	64.972	1.882	1.00	9.25	A
	ATOM	3210	CD1	TRP	A	415	23.494	64.225	0.851	1.00	9.72	A
	ATOM	3211	NE1	TRP	A	415	23.408	64.321	2.220	1.00	9.57	A
	ATOM	3212	CZ2	TRP	A	415	25.064	64.794	4.051	1.00	9.83	A
15	ATOM	3213	CZ3	TRP	A	415	27.309	65.158	3.201	1.00	9.05	A
	ATOM	3214	CH2	TRP	A	415	26.393	65.068	4.270	1.00	9.98	A
	ATOM	3215	C	TRP	A	415	25.140	65.041	-3.372	1.00	9.53	A
	ATOM	3216	O	TRP	A	415	26.251	64.528	-3.495	1.00	10.20	A
	ATOM	3217	N	SER	A	416	24.514	65.639	-4.379	1.00	9.04	A
20	ATOM	3218	CA	SER	A	416	25.143	65.724	-5.690	1.00	8.92	A
	ATOM	3219	CB	SER	A	416	24.144	65.357	-6.798	1.00	8.51	A
	ATOM	3220	OG	SER	A	416	22.870	65.939	-6.574	1.00	8.91	A
	ATOM	3221	C	SER	A	416	25.728	67.110	-5.933	1.00	8.58	A
	ATOM	3222	O	SER	A	416	26.388	67.346	-6.939	1.00	8.72	A
25	ATOM	3223	N	GLY	A	417	25.504	68.023	-4.995	1.00	8.72	A
	ATOM	3224	CA	GLY	A	417	26.035	69.361	-5.155	1.00	9.16	A
	ATOM	3225	C	GLY	A	417	27.549	69.389	-5.084	1.00	8.20	A
	ATOM	3226	O	GLY	A	417	28.194	70.109	-5.846	1.00	8.68	A
	ATOM	3227	N	TYR	A	418	28.125	68.591	-4.187	1.00	8.03	A
30	ATOM	3228	CA	TYR	A	418	29.575	68.583	-4.018	1.00	7.87	A
	ATOM	3229	CB	TYR	A	418	29.955	67.891	-2.699	1.00	7.48	A
	ATOM	3230	CG	TYR	A	418	30.086	66.390	-2.762	1.00	7.93	A
	ATOM	3231	CD1	TYR	A	418	31.328	65.794	-2.973	1.00	7.95	A
	ATOM	3232	CE1	TYR	A	418	31.467	64.414	-2.997	1.00	7.84	A
35	ATOM	3233	CD2	TYR	A	418	28.978	65.563	-2.583	1.00	8.11	A
	ATOM	3234	CE2	TYR	A	418	29.104	64.177	-2.608	1.00	8.06	A
	ATOM	3235	CZ	TYR	A	418	30.354	63.611	-2.813	1.00	7.96	A
	ATOM	3236	OH	TYR	A	418	30.501	62.248	-2.817	1.00	8.02	A
	ATOM	3237	C	TYR	A	418	30.346	67.988	-5.199	1.00	7.88	A
40	ATOM	3238	O	TYR	A	418	31.576	67.989	-5.208	1.00	7.86	A
	ATOM	3239	N	TYR	A	419	29.627	67.477	-6.194	1.00	7.67	A
	ATOM	3240	CA	TYR	A	419	30.282	66.952	-7.388	1.00	7.72	A
	ATOM	3241	CB	TYR	A	419	29.290	66.179	-8.265	1.00	7.93	A
	ATOM	3242	CG	TYR	A	419	28.676	64.947	-7.644	1.00	7.53	A
45	ATOM	3243	CD1	TYR	A	419	27.487	64.416	-8.152	1.00	7.43	A
	ATOM	3244	CE1	TYR	A	419	26.926	63.261	-7.619	1.00	8.40	A
	ATOM	3245	CD2	TYR	A	419	29.289	64.285	-6.579	1.00	7.84	A
	ATOM	3246	CE2	TYR	A	419	28.735	63.123	-6.041	1.00	8.37	A
	ATOM	3247	CZ	TYR	A	419	27.553	62.619	-6.567	1.00	8.35	A
50	ATOM	3248	OH	TYR	A	419	26.995	61.474	-6.047	1.00	8.31	A
	ATOM	3249	C	TYR	A	419	30.803	68.150	-8.190	1.00	7.72	A
	ATOM	3250	O	TYR	A	419	31.616	67.988	-9.103	1.00	8.10	A
	ATOM	3251	N	THR	A	420	30.338	69.348	-7.832	1.00	7.79	A
	ATOM	3252	CA	THR	A	420	30.718	70.574	-8.531	1.00	7.63	A
55	ATOM	3253	CB	THR	A	420	29.503	71.111	-9.333	1.00	7.52	A
	ATOM	3254	OG1	THR	A	420	29.016	70.077	-10.199	1.00	8.69	A
	ATOM	3255	CG2	THR	A	420	29.889	72.330	-10.171	1.00	9.65	A
	ATOM	3256	C	THR	A	420	31.261	71.712	-7.658	1.00	8.05	A
	ATOM	3257	O	THR	A	420	32.050	72.527	-8.131	1.00	8.13	A

5	ATOM	3258	N	SER	A	421	30.844	71.771	-6.396	1.00	8.23	A
	ATOM	3259	CA	SER	A	421	31.277	72.840	-5.491	1.00	8.39	A
	ATOM	3260	CB	SER	A	421	30.894	72.488	-4.054	1.00	8.23	A
	ATOM	3261	OG	SER	A	421	29.493	72.328	-3.942	1.00	9.95	A
	ATOM	3262	C	SER	A	421	32.766	73.172	-5.553	1.00	8.54	A
10	ATOM	3263	O	SER	A	421	33.612	72.276	-5.532	1.00	8.31	A
	ATOM	3264	N	ARG	A	422	33.076	74.468	-5.600	1.00	8.47	A
	ATOM	3265	CA	ARG	A	422	34.457	74.944	-5.683	1.00	8.89	A
	ATOM	3266	CB	ARG	A	422	35.200	74.655	-4.373	1.00	9.32	A
	ATOM	3267	CG	ARG	A	422	35.001	75.708	-3.275	1.00	8.93	A
15	ATOM	3268	CD	ARG	A	422	33.541	75.915	-2.854	1.00	8.00	A
	ATOM	3269	NE	ARG	A	422	33.480	76.889	-1.761	1.00	8.83	A
	ATOM	3270	CZ	ARG	A	422	33.533	76.580	-0.468	1.00	9.12	A
	ATOM	3271	NH1	ARG	A	422	33.622	75.316	-0.081	1.00	10.31	A
	ATOM	3272	NH2	ARG	A	422	33.565	77.545	0.444	1.00	9.63	A
20	ATOM	3273	C	ARG	A	422	35.174	74.285	-6.865	1.00	8.93	A
	ATOM	3274	O	ARG	A	422	36.201	73.616	-6.705	1.00	8.08	A
	ATOM	3275	N	PRO	A	423	34.648	74.485	-8.081	1.00	8.34	A
	ATOM	3276	CD	PRO	A	423	33.511	75.348	-8.449	1.00	8.14	A
	ATOM	3277	CA	PRO	A	423	35.258	73.887	-9.272	1.00	8.20	A
25	ATOM	3278	CB	PRO	A	423	34.248	74.212	-10.372	1.00	7.99	A
	ATOM	3279	CG	PRO	A	423	33.720	75.542	-9.940	1.00	8.18	A
	ATOM	3280	C	PRO	A	423	36.679	74.342	-9.606	1.00	8.42	A
	ATOM	3281	O	PRO	A	423	37.406	73.635	-10.300	1.00	7.85	A
	ATOM	3282	N	TYR	A	424	37.086	75.512	-9.125	1.00	8.22	A
30	ATOM	3283	CA	TYR	A	424	38.440	75.987	-9.399	1.00	8.69	A
	ATOM	3284	CB	TYR	A	424	38.678	77.357	-8.755	1.00	8.94	A
	ATOM	3285	CG	TYR	A	424	40.056	77.929	-9.021	1.00	9.20	A
	ATOM	3286	CD1	TYR	A	424	40.304	78.697	-10.156	1.00	10.09	A
	ATOM	3287	CE1	TYR	A	424	41.569	79.220	-10.411	1.00	11.78	A
35	ATOM	3288	CD2	TYR	A	424	41.117	77.693	-8.144	1.00	9.18	A
	ATOM	3289	CE2	TYR	A	424	42.388	78.211	-8.392	1.00	11.36	A
	ATOM	3290	CZ	TYR	A	424	42.606	78.976	-9.527	1.00	11.41	A
	ATOM	3291	OH	TYR	A	424	43.854	79.513	-9.774	1.00	13.60	A
	ATOM	3292	C	TYR	A	424	39.446	74.997	-8.818	1.00	8.12	A
40	ATOM	3293	O	TYR	A	424	40.409	74.605	-9.477	1.00	8.51	A
	ATOM	3294	N	HIS	A	425	39.204	74.588	-7.578	1.00	8.00	A
	ATOM	3295	CA	HIS	A	425	40.102	73.672	-6.884	1.00	7.92	A
	ATOM	3296	CB	HIS	A	425	39.841	73.793	-5.390	1.00	8.82	A
	ATOM	3297	CG	HIS	A	425	39.830	75.214	-4.928	1.00	9.54	A
45	ATOM	3298	CD2	HIS	A	425	38.817	76.107	-4.842	1.00	8.63	A
	ATOM	3299	ND1	HIS	A	425	40.985	75.917	-4.659	1.00	11.50	A
	ATOM	3300	CE1	HIS	A	425	40.684	77.184	-4.433	1.00	9.24	A
	ATOM	3301	NE2	HIS	A	425	39.376	77.326	-4.540	1.00	12.26	A
	ATOM	3302	C	HIS	A	425	39.982	72.242	-7.382	1.00	7.65	A
50	ATOM	3303	O	HIS	A	425	40.937	71.470	-7.298	1.00	6.25	A
	ATOM	3304	N	LYS	A	426	38.809	71.891	-7.900	1.00	6.92	A
	ATOM	3305	CA	LYS	A	426	38.601	70.566	-8.474	1.00	7.10	A
	ATOM	3306	CB	LYS	A	426	37.130	70.386	-8.863	1.00	7.64	A
	ATOM	3307	CG	LYS	A	426	36.233	69.957	-7.707	1.00	7.33	A
55	ATOM	3308	CD	LYS	A	426	34.758	69.974	-8.108	1.00	8.18	A
	ATOM	3309	CE	LYS	A	426	33.893	69.112	-7.180	1.00	7.20	A
	ATOM	3310	NZ	LYS	A	426	33.897	69.564	-5.757	1.00	8.35	A
	ATOM	3311	C	LYS	A	426	39.500	70.461	-9.711	1.00	6.80	A
	ATOM	3312	O	LYS	A	426	40.130	69.429	-9.950	1.00	7.71	A

5	ATOM	3313	N	ARG	A	427	39.562	71.536	-10.493	1.00	6.95	A
	ATOM	3314	CA	ARG	A	427	40.403	71.558	-11.677	1.00	7.61	A
	ATOM	3315	CB	ARG	A	427	40.055	72.780	-12.535	1.00	7.49	A
	ATOM	3316	CG	ARG	A	427	41.045	73.105	-13.645	1.00	8.69	A
	ATOM	3317	CD	ARG	A	427	41.239	71.986	-14.660	1.00	9.36	A
	ATOM	3318	NE	ARG	A	427	42.275	72.376	-15.614	1.00	11.26	A
	ATOM	3319	CZ	ARG	A	427	43.047	71.530	-16.288	1.00	11.18	A
	ATOM	3320	NH1	ARG	A	427	42.911	70.220	-16.132	1.00	11.18	A
	ATOM	3321	NH2	ARG	A	427	43.985	72.004	-17.101	1.00	11.85	A
	ATOM	3322	C	ARG	A	427	41.871	71.587	-11.251	1.00	7.82	A
10	ATOM	3323	O	ARG	A	427	42.708	70.901	-11.833	1.00	7.39	A
	ATOM	3324	N	MSE	A	428	42.179	72.370	-10.220	1.00	7.89	A
	ATOM	3325	CA	MSE	A	428	43.550	72.457	-9.729	1.00	7.92	A
	ATOM	3326	CB	MSE	A	428	43.613	73.415	-8.542	1.00	9.64	A
15	ATOM	3327	CG	MSE	A	428	45.022	73.778	-8.109	1.00	9.04	A
	ATOM	3328	SE	MSE	A	428	44.978	75.197	-6.818	1.00	16.90	A
	ATOM	3329	CE	MSE	A	428	46.844	75.667	-6.794	1.00	10.50	A
	ATOM	3330	C	MSE	A	428	44.058	71.072	-9.319	1.00	7.61	A
20	ATOM	3331	O	MSE	A	428	45.223	70.741	-9.528	1.00	6.75	A
	ATOM	3332	N	ASP	A	429	43.173	70.264	-8.742	1.00	7.36	A
	ATOM	3333	CA	ASP	A	429	43.532	68.915	-8.323	1.00	6.76	A
	ATOM	3334	CB	ASP	A	429	42.302	68.199	-7.764	1.00	7.80	A
25	ATOM	3335	CG	ASP	A	429	42.567	66.742	-7.454	1.00	7.25	A
	ATOM	3336	OD1	ASP	A	429	42.305	65.877	-8.322	1.00	7.35	A
	ATOM	3337	OD2	ASP	A	429	43.050	66.464	-6.339	1.00	8.83	A
	ATOM	3338	C	ASP	A	429	44.110	68.101	-9.477	1.00	6.82	A
30	ATOM	3339	O	ASP	A	429	45.126	67.426	-9.324	1.00	6.20	A
	ATOM	3340	N	ARG	A	430	43.465	68.174	-10.636	1.00	6.28	A
	ATOM	3341	CA	ARG	A	430	43.925	67.415	-11.790	1.00	6.60	A
	ATOM	3342	CB	ARG	A	430	42.864	67.436	-12.886	1.00	7.13	A
35	ATOM	3343	CG	ARG	A	430	41.575	66.745	-12.489	1.00	6.81	A
	ATOM	3344	CD	ARG	A	430	41.821	65.302	-12.057	1.00	7.18	A
	ATOM	3345	NE	ARG	A	430	40.578	64.536	-12.052	1.00	7.42	A
	ATOM	3346	CZ	ARG	A	430	39.899	64.186	-10.965	1.00	7.01	A
40	ATOM	3347	NH1	ARG	A	430	40.329	64.520	-9.754	1.00	6.58	A
	ATOM	3348	NH2	ARG	A	430	38.770	63.504	-11.092	1.00	7.28	A
	ATOM	3349	C	ARG	A	430	45.247	67.938	-12.331	1.00	6.64	A
	ATOM	3350	O	ARG	A	430	46.071	67.164	-12.828	1.00	6.98	A
45	ATOM	3351	N	VAL	A	431	45.448	69.246	-12.248	1.00	6.93	A
	ATOM	3352	CA	VAL	A	431	46.693	69.838	-12.717	1.00	7.00	A
	ATOM	3353	CB	VAL	A	431	46.613	71.381	-12.697	1.00	7.25	A
	ATOM	3354	CG1	VAL	A	431	47.966	71.984	-13.059	1.00	7.90	A
50	ATOM	3355	CG2	VAL	A	431	45.553	71.856	-13.684	1.00	7.34	A
	ATOM	3356	C	VAL	A	431	47.835	69.361	-11.814	1.00	7.33	A
	ATOM	3357	O	VAL	A	431	48.867	68.890	-12.291	1.00	6.53	A
	ATOM	3358	N	LEU	A	432	47.648	69.477	-10.504	1.00	6.42	A
55	ATOM	3359	CA	LEU	A	432	48.683	69.051	-9.574	1.00	7.15	A
	ATOM	3360	CB	LEU	A	432	48.314	69.449	-8.144	1.00	7.42	A
	ATOM	3361	CG	LEU	A	432	49.320	69.099	-7.040	1.00	7.44	A
	ATOM	3362	CD1	LEU	A	432	50.706	69.655	-7.368	1.00	7.97	A
	ATOM	3363	CD2	LEU	A	432	48.815	69.674	-5.718	1.00	7.95	A
	ATOM	3364	C	LEU	A	432	48.906	67.545	-9.676	1.00	6.90	A
	ATOM	3365	O	LEU	A	432	50.031	67.073	-9.538	1.00	7.14	A
	ATOM	3366	N	MSE	A	433	47.839	66.789	-9.921	1.00	6.62	A
	ATOM	3367	CA	MSE	A	433	47.973	65.343	-10.071	1.00	6.77	A

5	ATOM	3368	CB	MSE	A	433	46.650	64.728	-10.520	1.00	7.49	A
	ATOM	3369	CG	MSE	A	433	46.765	63.261	-10.899	1.00	7.23	A
	ATOM	3370	SE	MSE	A	433	45.147	62.554	-11.645	1.00	14.77	A
	ATOM	3371	CE	MSE	A	433	45.309	63.312	-13.420	1.00	11.03	A
	ATOM	3372	C	MSE	A	433	49.030	65.039	-11.130	1.00	6.61	A
10	ATOM	3373	O	MSE	A	433	49.915	64.198	-10.933	1.00	5.99	A
	ATOM	3374	N	HIS	A	434	48.926	65.732	-12.255	1.00	5.72	A
	ATOM	3375	CA	HIS	A	434	49.855	65.531	-13.352	1.00	6.68	A
	ATOM	3376	CB	HIS	A	434	49.340	66.203	-14.620	1.00	7.17	A
	ATOM	3377	CG	HIS	A	434	50.306	66.118	-15.755	1.00	6.69	A
15	ATOM	3378	CD2	HIS	A	434	50.676	65.067	-16.524	1.00	6.66	A
	ATOM	3379	ND1	HIS	A	434	51.107	67.172	-16.134	1.00	9.42	A
	ATOM	3380	CE1	HIS	A	434	51.932	66.771	-17.086	1.00	6.23	A
	ATOM	3381	NE2	HIS	A	434	51.692	65.498	-17.339	1.00	9.56	A
	ATOM	3382	C	HIS	A	434	51.259	66.038	-13.054	1.00	6.95	A
20	ATOM	3383	O	HIS	A	434	52.242	65.392	-13.414	1.00	6.29	A
	ATOM	3384	N	TYR	A	435	51.353	67.203	-12.417	1.00	6.61	A
	ATOM	3385	CA	TYR	A	435	52.656	67.768	-12.082	1.00	8.18	A
	ATOM	3386	CB	TYR	A	435	52.500	69.146	-11.431	1.00	9.43	A
	ATOM	3387	CG	TYR	A	435	52.370	70.313	-12.385	1.00	12.33	A
25	ATOM	3388	CD1	TYR	A	435	51.432	70.309	-13.417	1.00	12.80	A
	ATOM	3389	CE1	TYR	A	435	51.272	71.417	-14.251	1.00	13.62	A
	ATOM	3390	CD2	TYR	A	435	53.151	71.455	-12.211	1.00	14.28	A
	ATOM	3391	CE2	TYR	A	435	53.001	72.562	-13.034	1.00	15.81	A
	ATOM	3392	CZ	TYR	A	435	52.059	72.541	-14.050	1.00	15.15	A
30	ATOM	3393	OH	TYR	A	435	51.896	73.658	-14.841	1.00	17.94	A
	ATOM	3394	C	TYR	A	435	53.414	66.847	-11.128	1.00	6.75	A
	ATOM	3395	O	TYR	A	435	54.636	66.719	-11.226	1.00	7.81	A
	ATOM	3396	N	VAL	A	436	52.700	66.218	-10.195	1.00	5.90	A
	ATOM	3397	CA	VAL	A	436	53.355	65.305	-9.263	1.00	6.76	A
35	ATOM	3398	CB	VAL	A	436	52.382	64.850	-8.153	1.00	6.54	A
	ATOM	3399	CG1	VAL	A	436	52.963	63.665	-7.384	1.00	7.70	A
	ATOM	3400	CG2	VAL	A	436	52.132	66.009	-7.200	1.00	6.54	A
	ATOM	3401	C	VAL	A	436	53.892	64.101	-10.034	1.00	6.75	A
	ATOM	3402	O	VAL	A	436	55.041	63.698	-9.857	1.00	6.38	A
40	ATOM	3403	N	ARG	A	437	53.069	63.532	-10.905	1.00	5.91	A
	ATOM	3404	CA	ARG	A	437	53.518	62.393	-11.693	1.00	6.53	A
	ATOM	3405	CB	ARG	A	437	52.406	61.902	-12.621	1.00	6.39	A
	ATOM	3406	CG	ARG	A	437	52.904	60.916	-13.674	1.00	7.38	A
	ATOM	3407	CD	ARG	A	437	51.779	60.403	-14.552	1.00	7.95	A
45	ATOM	3408	NE	ARG	A	437	52.287	59.711	-15.735	1.00	6.99	A
	ATOM	3409	CZ	ARG	A	437	51.550	58.897	-16.486	1.00	7.60	A
	ATOM	3410	NH1	ARG	A	437	50.282	58.670	-16.170	1.00	8.52	A
	ATOM	3411	NH2	ARG	A	437	52.075	58.321	-17.559	1.00	7.42	A
	ATOM	3412	C	ARG	A	437	54.743	62.754	-12.528	1.00	6.68	A
50	ATOM	3413	O	ARG	A	437	55.725	62.009	-12.558	1.00	6.83	A
	ATOM	3414	N	ALA	A	438	54.682	63.892	-13.217	1.00	6.53	A
	ATOM	3415	CA	ALA	A	438	55.790	64.321	-14.066	1.00	7.02	A
	ATOM	3416	CB	ALA	A	438	55.385	65.550	-14.887	1.00	7.20	A
	ATOM	3417	C	ALA	A	438	57.061	64.613	-13.269	1.00	6.87	A
55	ATOM	3418	O	ALA	A	438	58.165	64.269	-13.702	1.00	8.03	A
	ATOM	3419	N	ALA	A	439	56.909	65.247	-12.110	1.00	7.12	A
	ATOM	3420	CA	ALA	A	439	58.061	65.569	-11.276	1.00	6.67	A
	ATOM	3421	CB	ALA	A	439	57.637	66.475	-10.123	1.00	7.46	A
	ATOM	3422	C	ALA	A	439	58.708	64.289	-10.741	1.00	7.35	A

5	ATOM	3423	O	ALA	A	439	59.930	64.141	-10.770	1.00	6.65	A
	ATOM	3424	N	GLU	A	440	57.897	63.360	-10.248	1.00	6.24	A
	ATOM	3425	CA	GLU	A	440	58.458	62.116	-9.739	1.00	7.04	A
	ATOM	3426	CB	GLU	A	440	57.382	61.279	-9.041	1.00	7.73	A
	ATOM	3427	CG	GLU	A	440	56.853	61.911	-7.762	1.00	8.18	A
	ATOM	3428	CD	GLU	A	440	56.186	60.904	-6.843	1.00	10.22	A
	ATOM	3429	OE1	GLU	A	440	55.089	60.406	-7.173	1.00	10.17	A
	ATOM	3430	OE2	GLU	A	440	56.773	60.603	-5.787	1.00	10.50	A
10	ATOM	3431	C	GLU	A	440	59.112	61.292	-10.851	1.00	6.93	A
	ATOM	3432	O	GLU	A	440	60.152	60.676	-10.639	1.00	7.92	A
	ATOM	3433	N	MSE	A	441	58.517	61.285	-12.040	1.00	6.93	A
	ATOM	3434	CA	MSE	A	441	59.084	60.513	-13.141	1.00	7.41	A
15	ATOM	3435	CB	MSE	A	441	58.068	60.378	-14.277	1.00	8.35	A
	ATOM	3436	CG	MSE	A	441	58.580	59.571	-15.465	1.00	8.46	A
	ATOM	3437	SE	MSE	A	441	57.255	59.396	-16.865	1.00	13.95	A
	ATOM	3438	CE	MSE	A	441	56.081	58.134	-15.968	1.00	10.73	A
	ATOM	3439	C	MSE	A	441	60.377	61.120	-13.677	1.00	7.44	A
20	ATOM	3440	O	MSE	A	441	61.381	60.423	-13.818	1.00	8.04	A
	ATOM	3441	N	LEU	A	442	60.354	62.416	-13.979	1.00	7.67	A
	ATOM	3442	CA	LEU	A	442	61.539	63.085	-14.509	1.00	8.05	A
	ATOM	3443	CB	LEU	A	442	61.233	64.553	-14.813	1.00	8.28	A
	ATOM	3444	CG	LEU	A	442	60.557	64.823	-16.161	1.00	8.01	A
	ATOM	3445	CD1	LEU	A	442	59.999	66.236	-16.193	1.00	9.63	A
25	ATOM	3446	CD2	LEU	A	442	61.564	64.612	-17.283	1.00	10.08	A
	ATOM	3447	C	LEU	A	442	62.750	62.999	-13.592	1.00	8.72	A
	ATOM	3448	O	LEU	A	442	63.881	62.855	-14.060	1.00	8.81	A
	ATOM	3449	N	SER	A	443	62.523	63.074	-12.284	1.00	8.42	A
30	ATOM	3450	CA	SER	A	443	63.635	63.020	-11.346	1.00	8.63	A
	ATOM	3451	CB	SER	A	443	63.306	63.818	-10.077	1.00	8.25	A
	ATOM	3452	OG	SER	A	443	62.192	63.273	-9.387	1.00	8.38	A
	ATOM	3453	C	SER	A	443	64.038	61.599	-10.975	1.00	9.17	A
	ATOM	3454	O	SER	A	443	65.105	61.388	-10.399	1.00	10.14	A
	ATOM	3455	N	ALA	A	444	63.201	60.628	-11.324	1.00	8.08	A
35	ATOM	3456	CA	ALA	A	444	63.488	59.231	-11.004	1.00	8.59	A
	ATOM	3457	CB	ALA	A	444	62.237	58.383	-11.202	1.00	9.58	A
	ATOM	3458	C	ALA	A	444	64.629	58.652	-11.833	1.00	9.05	A
	ATOM	3459	O	ALA	A	444	65.268	57.689	-11.416	1.00	9.90	A
40	ATOM	3460	N	TRP	A	445	64.886	59.229	-13.002	1.00	9.47	A
	ATOM	3461	CA	TRP	A	445	65.939	58.712	-13.869	1.00	10.27	A
	ATOM	3462	CB	TRP	A	445	65.943	59.452	-15.210	1.00	9.48	A
	ATOM	3463	CG	TRP	A	445	64.665	59.287	-15.975	1.00	8.72	A
	ATOM	3464	CD2	TRP	A	445	64.211	58.103	-16.648	1.00	8.20	A
	ATOM	3465	CE2	TRP	A	445	62.926	58.384	-17.163	1.00	7.89	A
	ATOM	3466	CE3	TRP	A	445	64.763	56.833	-16.862	1.00	9.03	A
45	ATOM	3467	CD1	TRP	A	445	63.670	60.209	-16.112	1.00	9.25	A
	ATOM	3468	NE1	TRP	A	445	62.623	59.675	-16.821	1.00	8.67	A
	ATOM	3469	CZ2	TRP	A	445	62.181	57.441	-17.881	1.00	7.85	A
50	ATOM	3470	CZ3	TRP	A	445	64.024	55.893	-17.575	1.00	9.31	A
	ATOM	3471	CH2	TRP	A	445	62.744	56.204	-18.076	1.00	8.54	A
	ATOM	3472	C	TRP	A	445	67.329	58.772	-13.251	1.00	10.91	A
	ATOM	3473	O	TRP	A	445	68.195	57.968	-13.594	1.00	12.14	A
	ATOM	3474	N	HIS	A	446	67.541	59.724	-12.348	1.00	11.75	A
	ATOM	3475	CA	HIS	A	446	68.836	59.870	-11.691	1.00	12.74	A
	ATOM	3476	CB	HIS	A	446	69.470	61.232	-11.985	1.00	14.40	A
55	ATOM	3477	CG	HIS	A	446	69.853	61.443	-13.413	1.00	15.98	A

5	ATOM	3478	CD2	HIS	A	446	71.011	61.196	-14.070	1.00	17.49	A
	ATOM	3479	ND1	HIS	A	446	69.000	62.008	-14.336	1.00	16.71	A
	ATOM	3480	CE1	HIS	A	446	69.618	62.103	-15.500	1.00	17.82	A
	ATOM	3481	NE2	HIS	A	446	70.838	61.618	-15.365	1.00	17.18	A
	ATOM	3482	C	HIS	A	446	68.734	59.775	-10.181	1.00	12.44	A
10	ATOM	3483	O	HIS	A	446	67.658	59.891	-9.595	1.00	12.19	A
	ATOM	3484	N	SER	A	447	69.887	59.573	-9.559	1.00	13.41	A
	ATOM	3485	CA	SER	A	447	69.984	59.553	-8.115	1.00	13.93	A
	ATOM	3486	CB	SER	A	447	71.047	58.549	-7.667	1.00	15.77	A
	ATOM	3487	OG	SER	A	447	71.107	58.470	-6.255	1.00	19.30	A
15	ATOM	3488	C	SER	A	447	70.452	60.989	-7.864	1.00	14.00	A
	ATOM	3489	O	SER	A	447	71.316	61.492	-8.586	1.00	14.59	A
	ATOM	3490	N	TRP	A	448	69.874	61.665	-6.878	1.00	13.08	A
	ATOM	3491	CA	TRP	A	448	70.259	63.045	-6.614	1.00	13.81	A
	ATOM	3492	CB	TRP	A	448	69.037	63.961	-6.688	1.00	13.00	A
20	ATOM	3493	CG	TRP	A	448	68.381	63.979	-8.032	1.00	11.48	A
	ATOM	3494	CD2	TRP	A	448	68.523	64.987	-9.035	1.00	10.99	A
	ATOM	3495	CE2	TRP	A	448	67.738	64.590	-10.140	1.00	10.00	A
	ATOM	3496	CE3	TRP	A	448	69.238	66.192	-9.108	1.00	11.04	A
	ATOM	3497	CD1	TRP	A	448	67.541	63.035	-8.551	1.00	11.29	A
25	ATOM	3498	NE1	TRP	A	448	67.150	63.395	-9.818	1.00	10.64	A
	ATOM	3499	CZ2	TRP	A	448	67.646	65.354	-11.306	1.00	11.20	A
	ATOM	3500	CZ3	TRP	A	448	69.147	66.952	-10.270	1.00	10.82	A
	ATOM	3501	CH2	TRP	A	448	68.355	66.527	-11.353	1.00	11.03	A
	ATOM	3502	C	TRP	A	448	70.945	63.261	-5.278	1.00	15.52	A
30	ATOM	3503	O	TRP	A	448	70.609	62.621	-4.283	1.00	15.44	A
	ATOM	3504	N	ASP	A	449	71.905	64.180	-5.270	1.00	17.52	A
	ATOM	3505	CA	ASP	A	449	72.627	64.520	-4.055	1.00	19.65	A
	ATOM	3506	CB	ASP	A	449	73.780	65.473	-4.380	1.00	22.50	A
	ATOM	3507	CG	ASP	A	449	74.655	65.764	-3.177	1.00	25.00	A
35	ATOM	3508	OD1	ASP	A	449	74.191	66.458	-2.248	1.00	26.37	A
	ATOM	3509	OD2	ASP	A	449	75.811	65.290	-3.161	1.00	27.45	A
	ATOM	3510	C	ASP	A	449	71.627	65.202	-3.128	1.00	19.63	A
	ATOM	3511	O	ASP	A	449	70.729	65.909	-3.589	1.00	19.29	A
	ATOM	3512	N	GLY	A	450	71.780	64.985	-1.826	1.00	20.01	A
40	ATOM	3513	CA	GLY	A	450	70.870	65.581	-0.864	1.00	20.00	A
	ATOM	3514	C	GLY	A	450	70.735	67.089	-0.962	1.00	20.23	A
	ATOM	3515	O	GLY	A	450	69.690	67.646	-0.616	1.00	19.88	A
	ATOM	3516	N	MET	A	451	71.786	67.755	-1.432	1.00	20.10	A
	ATOM	3517	CA	MET	A	451	71.768	69.209	-1.561	1.00	20.63	A
45	ATOM	3518	CB	MET	A	451	73.166	69.735	-1.896	1.00	23.63	A
	ATOM	3519	CG	MET	A	451	74.203	69.506	-0.815	1.00	27.14	A
	ATOM	3520	SD	MET	A	451	75.744	70.366	-1.188	1.00	32.31	A
	ATOM	3521	CE	MET	A	451	76.487	69.235	-2.362	1.00	29.66	A
	ATOM	3522	C	MET	A	451	70.787	69.704	-2.616	1.00	18.82	A
50	ATOM	3523	O	MET	A	451	70.419	70.877	-2.622	1.00	18.97	A
	ATOM	3524	N	ALA	A	452	70.373	68.814	-3.512	1.00	17.14	A
	ATOM	3525	CA	ALA	A	452	69.433	69.181	-4.564	1.00	16.09	A
	ATOM	3526	CB	ALA	A	452	69.469	68.149	-5.682	1.00	15.55	A
	ATOM	3527	C	ALA	A	452	68.019	69.307	-4.006	1.00	15.58	A
55	ATOM	3528	O	ALA	A	452	67.134	69.862	-4.655	1.00	15.31	A
	ATOM	3529	N	ARG	A	453	67.816	68.780	-2.802	1.00	14.93	A
	ATOM	3530	CA	ARG	A	453	66.520	68.844	-2.133	1.00	15.12	A
	ATOM	3531	CB	ARG	A	453	66.209	70.296	-1.757	1.00	16.65	A
	ATOM	3532	CG	ARG	A	453	67.260	70.927	-0.853	1.00	19.15	A

5	ATOM	3533	CD	ARG	A	453	67.014	72.415	-0.653	1.00	21.70	A
	ATOM	3534	NE	ARG	A	453	65.762	72.680	0.047	1.00	23.84	A
	ATOM	3535	CZ	ARG	A	453	65.266	73.896	0.255	1.00	25.33	A
	ATOM	3536	NH1	ARG	A	453	65.917	74.967	-0.187	1.00	25.98	A
	ATOM	3537	NH2	ARG	A	453	64.120	74.043	0.905	1.00	25.91	A
	ATOM	3538	C	ARG	A	453	65.376	68.269	-2.967	1.00	13.88	A
	ATOM	3539	O	ARG	A	453	64.232	68.701	-2.843	1.00	14.25	A
	ATOM	3540	N	ILE	A	454	65.683	67.289	-3.810	1.00	11.74	A
	ATOM	3541	CA	ILE	A	454	64.666	66.666	-4.648	1.00	11.41	A
	ATOM	3542	CB	ILE	A	454	65.310	65.691	-5.662	1.00	11.24	A
	ATOM	3543	CG2	ILE	A	454	64.225	64.960	-6.447	1.00	12.28	A
	ATOM	3544	CG1	ILE	A	454	66.260	66.456	-6.594	1.00	12.69	A
	ATOM	3545	CD1	ILE	A	454	65.605	67.562	-7.396	1.00	13.45	A
	ATOM	3546	C	ILE	A	454	63.633	65.910	-3.804	1.00	11.43	A
	ATOM	3547	O	ILE	A	454	62.429	66.142	-3.936	1.00	10.95	A
	ATOM	3548	N	GLU	A	455	64.100	65.013	-2.939	1.00	11.35	A
	ATOM	3549	CA	GLU	A	455	63.196	64.234	-2.092	1.00	11.75	A
	ATOM	3550	CB	GLU	A	455	63.981	63.274	-1.188	1.00	12.29	A
	ATOM	3551	CG	GLU	A	455	64.595	62.071	-1.896	1.00	12.76	A
	ATOM	3552	CD	GLU	A	455	65.938	62.375	-2.539	1.00	13.14	A
10	ATOM	3553	OE1	GLU	A	455	66.381	63.541	-2.473	1.00	14.41	A
	ATOM	3554	OE2	GLU	A	455	66.544	61.441	-3.108	1.00	12.50	A
	ATOM	3555	C	GLU	A	455	62.337	65.153	-1.230	1.00	11.49	A
	ATOM	3556	O	GLU	A	455	61.145	64.907	-1.025	1.00	11.26	A
15	ATOM	3557	N	GLU	A	456	62.948	66.218	-0.729	1.00	12.01	A
	ATOM	3558	CA	GLU	A	456	62.249	67.183	0.107	1.00	12.19	A
	ATOM	3559	CB	GLU	A	456	63.216	68.281	0.545	1.00	14.58	A
	ATOM	3560	CG	GLU	A	456	62.624	69.300	1.494	1.00	17.19	A
20	ATOM	3561	CD	GLU	A	456	63.514	70.515	1.653	1.00	18.91	A
	ATOM	3562	OE1	GLU	A	456	64.749	70.360	1.554	1.00	20.97	A
	ATOM	3563	OE2	GLU	A	456	62.982	71.621	1.887	1.00	20.95	A
	ATOM	3564	C	GLU	A	456	61.072	67.817	-0.635	1.00	11.41	A
25	ATOM	3565	O	GLU	A	456	59.950	67.859	-0.126	1.00	11.43	A
	ATOM	3566	N	ARG	A	457	61.332	68.321	-1.836	1.00	11.00	A
	ATOM	3567	CA	ARG	A	457	60.286	68.964	-2.622	1.00	10.38	A
	ATOM	3568	CB	ARG	A	457	60.898	69.660	-3.847	1.00	11.74	A
30	ATOM	3569	CG	ARG	A	457	61.302	71.116	-3.608	1.00	14.55	A
	ATOM	3570	CD	ARG	A	457	62.235	71.277	-2.416	1.00	17.43	A
	ATOM	3571	NE	ARG	A	457	62.539	72.681	-2.130	1.00	19.26	A
	ATOM	3572	CZ	ARG	A	457	63.355	73.442	-2.855	1.00	21.10	A
35	ATOM	3573	NH1	ARG	A	457	63.963	72.944	-3.924	1.00	21.18	A
	ATOM	3574	NH2	ARG	A	457	63.566	74.706	-2.507	1.00	21.77	A
	ATOM	3575	C	ARG	A	457	59.191	67.995	-3.054	1.00	9.31	A
	ATOM	3576	O	ARG	A	457	58.013	68.348	-3.048	1.00	8.43	A
40	ATOM	3577	N	LEU	A	458	59.575	66.776	-3.421	1.00	8.92	A
	ATOM	3578	CA	LEU	A	458	58.594	65.783	-3.844	1.00	9.14	A
	ATOM	3579	CB	LEU	A	458	59.293	64.572	-4.465	1.00	8.78	A
	ATOM	3580	CG	LEU	A	458	59.992	64.878	-5.799	1.00	8.90	A
45	ATOM	3581	CD1	LEU	A	458	60.677	63.624	-6.313	1.00	9.97	A
	ATOM	3582	CD2	LEU	A	458	58.970	65.395	-6.825	1.00	9.94	A
	ATOM	3583	C	LEU	A	458	57.706	65.350	-2.685	1.00	9.64	A
	ATOM	3584	O	LEU	A	458	56.511	65.124	-2.872	1.00	10.33	A
50	ATOM	3585	N	GLU	A	459	58.277	65.243	-1.487	1.00	9.21	A
	ATOM	3586	CA	GLU	A	459	57.481	64.852	-0.328	1.00	9.96	A
	ATOM	3587	CB	GLU	A	459	58.372	64.654	0.902	1.00	11.30	A
	ATOM	3587	CB	GLU	A	459	58.372	64.654	0.902	1.00	11.30	A

5	ATOM	3588	CG	GLU	A	459	57.603	64.225	2.146	1.00	13.61	A
	ATOM	3589	CD	GLU	A	459	58.497	63.617	3.213	1.00	15.23	A
	ATOM	3590	OE1	GLU	A	459	59.217	64.371	3.897	1.00	18.32	A
	ATOM	3591	OE2	GLU	A	459	58.482	62.377	3.358	1.00	17.20	A
	ATOM	3592	C	GLU	A	459	56.445	65.940	-0.059	1.00	9.87	A
10	ATOM	3593	O	GLU	A	459	55.279	65.653	0.205	1.00	8.53	A
	ATOM	3594	N	GLN	A	460	56.874	67.197	-0.137	1.00	8.94	A
	ATOM	3595	CA	GLN	A	460	55.962	68.312	0.083	1.00	9.46	A
	ATOM	3596	CB	GLN	A	460	56.706	69.640	-0.067	1.00	11.33	A
	ATOM	3597	CG	GLN	A	460	55.828	70.862	0.130	1.00	14.48	A
15	ATOM	3598	CD	GLN	A	460	56.541	72.153	-0.221	1.00	16.73	A
	ATOM	3599	OE1	GLN	A	460	56.024	73.242	0.020	1.00	20.84	A
	ATOM	3600	NE2	GLN	A	460	57.729	72.036	-0.803	1.00	18.45	A
	ATOM	3601	C	GLN	A	460	54.823	68.246	-0.937	1.00	9.40	A
	ATOM	3602	O	GLN	A	460	53.651	68.330	-0.580	1.00	8.87	A
20	ATOM	3603	N	ALA	A	461	55.169	68.081	-2.210	1.00	8.69	A
	ATOM	3604	CA	ALA	A	461	54.146	68.023	-3.247	1.00	8.76	A
	ATOM	3605	CB	ALA	A	461	54.796	67.910	-4.622	1.00	8.72	A
	ATOM	3606	C	ALA	A	461	53.160	66.877	-3.034	1.00	8.44	A
	ATOM	3607	O	ALA	A	461	51.947	67.073	-3.113	1.00	8.84	A
25	ATOM	3608	N	ARG	A	462	53.678	65.684	-2.763	1.00	7.93	A
	ATOM	3609	CA	ARG	A	462	52.812	64.529	-2.548	1.00	7.87	A
	ATOM	3610	CB	ARG	A	462	53.629	63.255	-2.292	1.00	7.57	A
	ATOM	3611	CG	ARG	A	462	54.346	62.679	-3.515	1.00	7.40	A
	ATOM	3612	CD	ARG	A	462	54.815	61.252	-3.233	1.00	7.74	A
30	ATOM	3613	NE	ARG	A	462	55.726	61.190	-2.089	1.00	7.74	A
	ATOM	3614	CZ	ARG	A	462	57.043	61.352	-2.169	1.00	8.73	A
	ATOM	3615	NH1	ARG	A	462	57.621	61.578	-3.344	1.00	8.89	A
	ATOM	3616	NH2	ARG	A	462	57.787	61.303	-1.070	1.00	9.62	A
	ATOM	3617	C	ARG	A	462	51.882	64.747	-1.365	1.00	8.16	A
35	ATOM	3618	O	ARG	A	462	50.707	64.389	-1.416	1.00	7.32	A
	ATOM	3619	N	ARG	A	463	52.399	65.344	-0.298	1.00	8.35	A
	ATOM	3620	CA	ARG	A	463	51.576	65.546	0.884	1.00	9.21	A
	ATOM	3621	CB	ARG	A	463	52.473	65.823	2.093	1.00	9.46	A
	ATOM	3622	CG	ARG	A	463	53.219	64.564	2.500	1.00	9.86	A
40	ATOM	3623	CD	ARG	A	463	54.152	64.737	3.681	1.00	11.93	A
	ATOM	3624	NE	ARG	A	463	54.673	63.433	4.075	1.00	13.77	A
	ATOM	3625	CZ	ARG	A	463	55.453	63.216	5.128	1.00	14.71	A
	ATOM	3626	NH1	ARG	A	463	55.815	64.225	5.906	1.00	15.88	A
	ATOM	3627	NH2	ARG	A	463	55.857	61.982	5.405	1.00	15.92	A
45	ATOM	3628	C	ARG	A	463	50.485	66.599	0.742	1.00	9.13	A
	ATOM	3629	O	ARG	A	463	49.386	66.420	1.266	1.00	8.63	A
	ATOM	3630	N	GLU	A	464	50.760	67.681	0.020	1.00	8.86	A
	ATOM	3631	CA	GLU	A	464	49.743	68.712	-0.149	1.00	8.79	A
	ATOM	3632	CB	GLU	A	464	50.359	69.995	-0.719	1.00	10.23	A
50	ATOM	3633	CG	GLU	A	464	51.526	70.535	0.118	1.00	12.65	A
	ATOM	3634	CD	GLU	A	464	51.115	71.035	1.501	1.00	15.53	A
	ATOM	3635	OE1	GLU	A	464	50.127	70.527	2.075	1.00	15.74	A
	ATOM	3636	OE2	GLU	A	464	51.802	71.936	2.027	1.00	18.42	A
	ATOM	3637	C	GLU	A	464	48.638	68.193	-1.064	1.00	8.27	A
55	ATOM	3638	O	GLU	A	464	47.459	68.460	-0.830	1.00	8.83	A
	ATOM	3639	N	LEU	A	465	49.012	67.449	-2.102	1.00	8.19	A
	ATOM	3640	CA	LEU	A	465	48.008	66.887	-3.000	1.00	7.76	A
	ATOM	3641	CB	LEU	A	465	48.666	66.269	-4.240	1.00	7.54	A
	ATOM	3642	CG	LEU	A	465	47.706	65.594	-5.231	1.00	7.30	A

5	ATOM	3643	CD1	LEU	A	465	46.652	66.591	-5.710	1.00	8.29	A
	ATOM	3644	CD2	LEU	A	465	48.502	65.043	-6.405	1.00	8.63	A
	ATOM	3645	C	LEU	A	465	47.219	65.817	-2.241	1.00	7.24	A
	ATOM	3646	O	LEU	A	465	45.995	65.720	-2.368	1.00	7.02	A
	ATOM	3647	N	SER	A	466	47.920	65.014	-1.444	1.00	6.60	A
	ATOM	3648	CA	SER	A	466	47.258	63.972	-0.670	1.00	7.04	A
	ATOM	3649	CB	SER	A	466	48.284	63.145	0.106	1.00	7.46	A
10	ATOM	3650	OG	SER	A	466	49.039	62.325	-0.766	1.00	8.02	A
	ATOM	3651	C	SER	A	466	46.249	64.567	0.303	1.00	6.94	A
	ATOM	3652	O	SER	A	466	45.140	64.053	0.443	1.00	6.64	A
	ATOM	3653	N	LEU	A	467	46.638	65.649	0.969	1.00	6.68	A
	ATOM	3654	CA	LEU	A	467	45.759	66.306	1.922	1.00	7.53	A
15	ATOM	3655	CB	LEU	A	467	46.462	67.522	2.532	1.00	7.48	A
	ATOM	3656	CG	LEU	A	467	45.653	68.259	3.601	1.00	9.74	A
	ATOM	3657	CD1	LEU	A	467	45.493	67.369	4.816	1.00	11.77	A
	ATOM	3658	CD2	LEU	A	467	46.359	69.555	3.975	1.00	11.14	A
	ATOM	3659	C	LEU	A	467	44.462	66.753	1.251	1.00	7.29	A
20	ATOM	3660	O	LEU	A	467	43.381	66.624	1.826	1.00	7.06	A
	ATOM	3661	N	PHE	A	468	44.570	67.270	0.029	1.00	6.97	A
	ATOM	3662	CA	PHE	A	468	43.392	67.756	-0.680	1.00	6.88	A
	ATOM	3663	CB	PHE	A	468	43.800	68.553	-1.925	1.00	7.64	A
	ATOM	3664	CG	PHE	A	468	42.688	69.391	-2.491	1.00	7.18	A
	ATOM	3665	CD1	PHE	A	468	42.039	70.331	-1.695	1.00	7.53	A
25	ATOM	3666	CD2	PHE	A	468	42.264	69.221	-3.804	1.00	7.39	A
	ATOM	3667	CE1	PHE	A	468	40.979	71.089	-2.198	1.00	7.30	A
	ATOM	3668	CE2	PHE	A	468	41.204	69.972	-4.314	1.00	7.16	A
	ATOM	3669	CZ	PHE	A	468	40.561	70.907	-3.510	1.00	7.44	A
30	ATOM	3670	C	PHE	A	468	42.402	66.662	-1.069	1.00	6.45	A
	ATOM	3671	O	PHE	A	468	41.259	66.964	-1.413	1.00	7.00	A
	ATOM	3672	N	GLN	A	469	42.829	65.401	-1.018	1.00	6.03	A
	ATOM	3673	CA	GLN	A	469	41.931	64.302	-1.352	1.00	6.57	A
	ATOM	3674	CB	GLN	A	469	42.707	62.998	-1.542	1.00	6.70	A
	ATOM	3675	CG	GLN	A	469	43.795	63.094	-2.600	1.00	7.58	A
35	ATOM	3676	CD	GLN	A	469	43.304	63.745	-3.878	1.00	7.69	A
	ATOM	3677	OE1	GLN	A	469	43.860	64.748	-4.329	1.00	9.02	A
	ATOM	3678	NE2	GLN	A	469	42.258	63.184	-4.465	1.00	5.38	A
	ATOM	3679	C	GLN	A	469	40.898	64.121	-0.250	1.00	6.50	A
	ATOM	3680	O	GLN	A	469	39.927	63.383	-0.416	1.00	7.49	A
40	ATOM	3681	N	HIS	A	470	41.119	64.792	0.878	1.00	6.70	A
	ATOM	3682	CA	HIS	A	470	40.195	64.727	2.004	1.00	7.12	A
	ATOM	3683	CB	HIS	A	470	40.563	65.781	3.047	1.00	7.31	A
	ATOM	3684	CG	HIS	A	470	39.594	65.852	4.183	1.00	7.78	A
	ATOM	3685	CD2	HIS	A	470	38.969	64.869	4.872	1.00	7.00	A
45	ATOM	3686	ND1	HIS	A	470	39.144	67.041	4.715	1.00	9.94	A
	ATOM	3687	CE1	HIS	A	470	38.281	66.786	5.683	1.00	6.65	A
	ATOM	3688	NE2	HIS	A	470	38.157	65.476	5.797	1.00	10.50	A
	ATOM	3689	C	HIS	A	470	38.758	64.969	1.537	1.00	6.99	A
50	ATOM	3690	O	HIS	A	470	38.527	65.722	0.587	1.00	6.65	A
	ATOM	3691	N	HIS	A	471	37.793	64.351	2.215	1.00	7.65	A
	ATOM	3692	CA	HIS	A	471	36.398	64.503	1.824	1.00	7.92	A
	ATOM	3693	CB	HIS	A	471	35.532	63.380	2.417	1.00	7.70	A
	ATOM	3694	CG	HIS	A	471	35.636	63.249	3.901	1.00	7.25	A
55	ATOM	3695	CD2	HIS	A	471	34.904	63.802	4.894	1.00	8.79	A
	ATOM	3696	ND1	HIS	A	471	36.612	62.493	4.515	1.00	8.77	A
	ATOM	3697	CE1	HIS	A	471	36.476	62.589	5.825	1.00	8.02	A

5	ATOM	3698	NE2	HIS	A	471	35.448	63.377	6.080	1.00	8.27	A
	ATOM	3699	C	HIS	A	471	35.775	65.873	2.102	1.00	8.28	A
	ATOM	3700	O	HIS	A	471	34.566	66.039	1.965	1.00	8.06	A
	ATOM	3701	N	ASP	A	472	36.598	66.839	2.510	1.00	8.09	A
	ATOM	3702	CA	ASP	A	472	36.138	68.219	2.681	1.00	8.05	A
10	ATOM	3703	CB	ASP	A	472	36.134	68.660	4.144	1.00	9.12	A
	ATOM	3704	CG	ASP	A	472	35.001	68.046	4.927	1.00	8.91	A
	ATOM	3705	OD1	ASP	A	472	33.837	68.191	4.490	1.00	10.33	A
	ATOM	3706	OD2	ASP	A	472	35.274	67.426	5.974	1.00	9.95	A
	ATOM	3707	C	ASP	A	472	37.083	69.111	1.880	1.00	8.31	A
15	ATOM	3708	O	ASP	A	472	36.989	70.341	1.921	1.00	8.71	A
	ATOM	3709	N	GLY	A	473	37.991	68.476	1.143	1.00	7.76	A
	ATOM	3710	CA	GLY	A	473	38.941	69.214	0.329	1.00	6.95	A
	ATOM	3711	C	GLY	A	473	38.449	69.319	-1.098	1.00	6.25	A
	ATOM	3712	O	GLY	A	473	37.781	70.286	-1.461	1.00	7.15	A
20	ATOM	3713	N	ILE	A	474	38.753	68.306	-1.904	1.00	7.12	A
	ATOM	3714	CA	ILE	A	474	38.345	68.297	-3.302	1.00	7.43	A
	ATOM	3715	CB	ILE	A	474	38.883	67.023	-4.011	1.00	6.98	A
	ATOM	3716	CG2	ILE	A	474	38.271	65.774	-3.383	1.00	7.56	A
	ATOM	3717	CG1	ILE	A	474	38.604	67.097	-5.514	1.00	7.17	A
25	ATOM	3718	CD1	ILE	A	474	39.279	65.983	-6.308	1.00	9.11	A
	ATOM	3719	C	ILE	A	474	36.824	68.408	-3.468	1.00	8.30	A
	ATOM	3720	O	ILE	A	474	36.334	68.865	-4.500	1.00	8.97	A
	ATOM	3721	N	THR	A	475	36.087	68.009	-2.436	1.00	7.83	A
	ATOM	3722	CA	THR	A	475	34.625	68.054	-2.440	1.00	8.11	A
30	ATOM	3723	CB	THR	A	475	34.066	67.378	-1.189	1.00	8.53	A
	ATOM	3724	OG1	THR	A	475	34.589	68.053	-0.038	1.00	8.85	A
	ATOM	3725	CG2	THR	A	475	34.458	65.905	-1.139	1.00	9.50	A
	ATOM	3726	C	THR	A	475	34.067	69.482	-2.456	1.00	8.06	A
	ATOM	3727	O	THR	A	475	32.906	69.702	-2.817	1.00	8.47	A
35	ATOM	3728	N	GLY	A	476	34.888	70.448	-2.051	1.00	7.78	A
	ATOM	3729	CA	GLY	A	476	34.435	71.828	-2.020	1.00	8.58	A
	ATOM	3730	C	GLY	A	476	33.424	72.078	-0.914	1.00	8.79	A
	ATOM	3731	O	GLY	A	476	32.534	72.917	-1.062	1.00	8.66	A
	ATOM	3732	N	THR	A	477	33.558	71.354	0.195	1.00	8.54	A
40	ATOM	3733	CA	THR	A	477	32.634	71.502	1.315	1.00	9.22	A
	ATOM	3734	CB	THR	A	477	32.012	70.134	1.700	1.00	8.79	A
	ATOM	3735	OG1	THR	A	477	33.053	69.184	1.974	1.00	8.67	A
	ATOM	3736	CG2	THR	A	477	31.150	69.610	0.558	1.00	9.58	A
	ATOM	3737	C	THR	A	477	33.239	72.144	2.567	1.00	9.40	A
45	ATOM	3738	O	THR	A	477	32.671	72.034	3.655	1.00	10.45	A
	ATOM	3739	N	ALA	A	478	34.374	72.826	2.417	1.00	9.36	A
	ATOM	3740	CA	ALA	A	478	35.022	73.479	3.558	1.00	9.20	A
	ATOM	3741	CB	ALA	A	478	36.535	73.254	3.501	1.00	10.02	A
	ATOM	3742	C	ALA	A	478	34.722	74.979	3.619	1.00	9.62	A
50	ATOM	3743	O	ALA	A	478	34.225	75.572	2.657	1.00	8.69	A
	ATOM	3744	N	LYS	A	479	35.016	75.598	4.759	1.00	9.96	A
	ATOM	3745	CA	LYS	A	479	34.775	77.030	4.888	1.00	10.67	A
	ATOM	3746	CB	LYS	A	479	34.961	77.492	6.337	1.00	12.18	A
	ATOM	3747	CG	LYS	A	479	33.942	76.890	7.300	1.00	15.03	A
55	ATOM	3748	CD	LYS	A	479	34.018	77.529	8.677	1.00	18.09	A
	ATOM	3749	CE	LYS	A	479	33.187	78.798	8.755	1.00	20.24	A
	ATOM	3750	NZ	LYS	A	479	31.717	78.517	8.701	1.00	19.56	A
	ATOM	3751	C	LYS	A	479	35.746	77.761	3.972	1.00	10.66	A
	ATOM	3752	O	LYS	A	479	36.793	77.225	3.607	1.00	10.46	A

5	ATOM	3753	N	THR	A	480	35.393	78.984	3.603	1.00	11.10	A
	ATOM	3754	CA	THR	A	480	36.214	79.784	2.707	1.00	11.50	A
	ATOM	3755	CB	THR	A	480	35.646	81.208	2.584	1.00	13.37	A
	ATOM	3756	OG1	THR	A	480	34.331	81.139	2.021	1.00	14.84	A
	ATOM	3757	CG2	THR	A	480	36.529	82.068	1.683	1.00	13.82	A
	ATOM	3758	C	THR	A	480	37.696	79.870	3.059	1.00	11.02	A
	ATOM	3759	O	THR	A	480	38.548	79.651	2.192	1.00	10.46	A
	ATOM	3760	N	HIS	A	481	38.025	80.179	4.310	1.00	10.35	A
10	ATOM	3761	CA	HIS	A	481	39.437	80.296	4.655	1.00	9.50	A
	ATOM	3762	CB	HIS	A	481	39.621	80.983	6.023	1.00	10.43	A
	ATOM	3763	CG	HIS	A	481	39.453	80.077	7.204	1.00	10.15	A
	ATOM	3764	CD2	HIS	A	481	40.366	79.556	8.057	1.00	10.66	A
15	ATOM	3765	ND1	HIS	A	481	38.223	79.632	7.641	1.00	11.08	A
	ATOM	3766	CE1	HIS	A	481	38.387	78.878	8.712	1.00	11.48	A
	ATOM	3767	NE2	HIS	A	481	39.678	78.816	8.986	1.00	10.90	A
	ATOM	3768	C	HIS	A	481	40.169	78.955	4.610	1.00	9.97	A
	ATOM	3769	O	HIS	A	481	41.390	78.914	4.454	1.00	10.08	A
20	ATOM	3770	N	VAL	A	482	39.423	77.859	4.726	1.00	9.90	A
	ATOM	3771	CA	VAL	A	482	40.030	76.534	4.671	1.00	9.55	A
	ATOM	3772	CB	VAL	A	482	39.103	75.471	5.296	1.00	8.77	A
	ATOM	3773	CG1	VAL	A	482	39.771	74.101	5.263	1.00	8.62	A
	ATOM	3774	CG2	VAL	A	482	38.794	75.852	6.744	1.00	9.85	A
25	ATOM	3775	C	VAL	A	482	40.327	76.206	3.206	1.00	9.39	A
	ATOM	3776	O	VAL	A	482	41.374	75.646	2.886	1.00	9.70	A
	ATOM	3777	N	VAL	A	483	39.405	76.568	2.319	1.00	9.35	A
	ATOM	3778	CA	VAL	A	483	39.612	76.356	0.893	1.00	9.49	A
	ATOM	3779	CB	VAL	A	483	38.412	76.872	0.075	1.00	9.54	A
30	ATOM	3780	CG1	VAL	A	483	38.728	76.821	-1.412	1.00	10.64	A
	ATOM	3781	CG2	VAL	A	483	37.182	76.023	0.377	1.00	10.55	A
	ATOM	3782	C	VAL	A	483	40.873	77.126	0.487	1.00	9.63	A
	ATOM	3783	O	VAL	A	483	41.693	76.636	-0.290	1.00	9.14	A
	ATOM	3784	N	VAL	A	484	41.034	78.328	1.037	1.00	10.23	A
35	ATOM	3785	CA	VAL	A	484	42.203	79.142	0.734	1.00	10.83	A
	ATOM	3786	CB	VAL	A	484	42.112	80.524	1.410	1.00	10.78	A
	ATOM	3787	CG1	VAL	A	484	43.445	81.261	1.292	1.00	11.71	A
	ATOM	3788	CG2	VAL	A	484	41.009	81.333	0.754	1.00	11.99	A
	ATOM	3789	C	VAL	A	484	43.477	78.442	1.187	1.00	10.65	A
40	ATOM	3790	O	VAL	A	484	44.488	78.473	0.484	1.00	11.13	A
	ATOM	3791	N	ASP	A	485	43.431	77.809	2.357	1.00	9.92	A
	ATOM	3792	CA	ASP	A	485	44.596	77.094	2.862	1.00	9.04	A
	ATOM	3793	CB	ASP	A	485	44.331	76.550	4.271	1.00	10.28	A
	ATOM	3794	CG	ASP	A	485	45.571	75.944	4.904	1.00	10.84	A
45	ATOM	3795	OD1	ASP	A	485	45.531	74.760	5.291	1.00	11.04	A
	ATOM	3796	OD2	ASP	A	485	46.592	76.657	5.013	1.00	13.22	A
	ATOM	3797	C	ASP	A	485	44.960	75.945	1.922	1.00	8.24	A
	ATOM	3798	O	ASP	A	485	46.131	75.739	1.613	1.00	8.35	A
	ATOM	3799	N	TYR	A	486	43.959	75.192	1.474	1.00	8.00	A
50	ATOM	3800	CA	TYR	A	486	44.211	74.088	0.550	1.00	8.25	A
	ATOM	3801	CB	TYR	A	486	42.912	73.357	0.205	1.00	8.89	A
	ATOM	3802	CG	TYR	A	486	42.326	72.506	1.311	1.00	8.67	A
	ATOM	3803	CD1	TYR	A	486	40.953	72.504	1.542	1.00	8.68	A
	ATOM	3804	CE1	TYR	A	486	40.386	71.694	2.520	1.00	8.58	A
55	ATOM	3805	CD2	TYR	A	486	43.131	71.669	2.095	1.00	9.01	A
	ATOM	3806	CE2	TYR	A	486	42.567	70.848	3.085	1.00	9.81	A
	ATOM	3807	CZ	TYR	A	486	41.192	70.872	3.284	1.00	9.19	A

5	ATOM	3808	OH	TYR	A	486	40.607	70.075	4.245	1.00	10.42	A
	ATOM	3809	C	TYR	A	486	44.831	74.618	-0.740	1.00	9.13	A
	ATOM	3810	O	TYR	A	486	45.748	74.009	-1.283	1.00	8.83	A
	ATOM	3811	N	GLU	A	487	44.324	75.748	-1.229	1.00	9.52	A
	ATOM	3812	CA	GLU	A	487	44.841	76.345	-2.456	1.00	10.36	A
10	ATOM	3813	CB	GLU	A	487	44.007	77.563	-2.865	1.00	11.32	A
	ATOM	3814	CG	GLU	A	487	44.321	78.044	-4.282	1.00	13.08	A
	ATOM	3815	CD	GLU	A	487	43.569	79.300	-4.677	1.00	15.53	A
	ATOM	3816	OE1	GLU	A	487	42.384	79.441	-4.310	1.00	16.78	A
	ATOM	3817	OE2	GLU	A	487	44.163	80.147	-5.377	1.00	17.62	A
15	ATOM	3818	C	GLU	A	487	46.296	76.771	-2.293	1.00	11.00	A
	ATOM	3819	O	GLU	A	487	47.125	76.522	-3.168	1.00	10.62	A
	ATOM	3820	N	GLN	A	488	46.601	77.423	-1.175	1.00	11.10	A
	ATOM	3821	CA	GLN	A	488	47.962	77.875	-0.910	1.00	12.20	A
	ATOM	3822	CB	GLN	A	488	48.031	78.621	0.425	1.00	15.17	A
20	ATOM	3823	CG	GLN	A	488	47.343	79.970	0.426	1.00	19.59	A
	ATOM	3824	CD	GLN	A	488	47.395	80.642	1.782	1.00	21.97	A
	ATOM	3825	OE1	GLN	A	488	47.075	81.821	1.912	1.00	25.37	A
	ATOM	3826	NE2	GLN	A	488	47.795	79.890	2.804	1.00	24.06	A
	ATOM	3827	C	GLN	A	488	48.904	76.684	-0.865	1.00	11.05	A
25	ATOM	3828	O	GLN	A	488	50.000	76.727	-1.421	1.00	10.97	A
	ATOM	3829	N	ARG	A	489	48.473	75.621	-0.190	1.00	9.60	A
	ATOM	3830	CA	ARG	A	489	49.278	74.416	-0.083	1.00	9.37	A
	ATOM	3831	CB	ARG	A	489	48.571	73.385	0.804	1.00	9.55	A
	ATOM	3832	CG	ARG	A	489	48.601	73.714	2.294	1.00	10.40	A
30	ATOM	3833	CD	ARG	A	489	47.660	72.790	3.063	1.00	10.86	A
	ATOM	3834	NE	ARG	A	489	47.738	72.969	4.513	1.00	11.17	A
	ATOM	3835	CZ	ARG	A	489	48.620	72.361	5.302	1.00	12.00	A
	ATOM	3836	NH1	ARG	A	489	49.513	71.522	4.792	1.00	13.64	A
	ATOM	3837	NH2	ARG	A	489	48.606	72.593	6.610	1.00	12.68	A
35	ATOM	3838	C	ARG	A	489	49.528	73.835	-1.472	1.00	9.02	A
	ATOM	3839	O	ARG	A	489	50.656	73.468	-1.801	1.00	8.75	A
	ATOM	3840	N	MSE	A	490	48.487	73.766	-2.297	1.00	9.23	A
	ATOM	3841	CA	MSE	A	490	48.666	73.224	-3.639	1.00	9.79	A
	ATOM	3842	CB	MSE	A	490	47.314	72.964	-4.314	1.00	10.83	A
40	ATOM	3843	CG	MSE	A	490	46.571	71.768	-3.719	1.00	11.89	A
	ATOM	3844	SE	MSE	A	490	45.198	71.045	-4.876	1.00	18.09	A
	ATOM	3845	CE	MSE	A	490	43.813	72.317	-4.470	1.00	13.98	A
	ATOM	3846	C	MSE	A	490	49.539	74.117	-4.519	1.00	10.09	A
	ATOM	3847	O	MSE	A	490	50.254	73.620	-5.387	1.00	9.19	A
45	ATOM	3848	N	GLN	A	491	49.490	75.427	-4.300	1.00	10.39	A
	ATOM	3849	CA	GLN	A	491	50.314	76.332	-5.093	1.00	12.11	A
	ATOM	3850	CB	GLN	A	491	49.972	77.790	-4.786	1.00	14.32	A
	ATOM	3851	CG	GLN	A	491	50.755	78.791	-5.620	1.00	19.08	A
	ATOM	3852	CD	GLN	A	491	50.647	78.520	-7.109	1.00	21.56	A
50	ATOM	3853	OE1	GLN	A	491	51.427	77.746	-7.676	1.00	23.81	A
	ATOM	3854	NE2	GLN	A	491	49.669	79.145	-7.750	1.00	23.81	A
	ATOM	3855	C	GLN	A	491	51.779	76.064	-4.769	1.00	11.74	A
	ATOM	3856	O	GLN	A	491	52.630	76.040	-5.658	1.00	10.95	A
	ATOM	3857	N	GLU	A	492	52.068	75.851	-3.489	1.00	11.42	A
55	ATOM	3858	CA	GLU	A	492	53.432	75.570	-3.066	1.00	12.73	A
	ATOM	3859	CB	GLU	A	492	53.511	75.506	-1.536	1.00	15.62	A
	ATOM	3860	CG	GLU	A	492	52.957	76.743	-0.844	1.00	21.31	A
	ATOM	3861	CD	GLU	A	492	53.040	76.666	0.668	1.00	24.20	A
	ATOM	3862	OE1	GLU	A	492	52.577	75.660	1.249	1.00	26.61	A

5	ATOM	3863	OE2	GLU	A	492	53.564	77.622	1.280	1.00	27.33	A
	ATOM	3864	C	GLU	A	492	53.863	74.236	-3.669	1.00	10.97	A
	ATOM	3865	O	GLU	A	492	55.014	74.065	-4.073	1.00	11.10	A
	ATOM	3866	N	ALA	A	493	52.929	73.292	-3.734	1.00	9.75	A
	ATOM	3867	CA	ALA	A	493	53.215	71.979	-4.301	1.00	8.02	A
	ATOM	3868	CB	ALA	A	493	52.018	71.048	-4.097	1.00	8.73	A
	ATOM	3869	C	ALA	A	493	53.544	72.100	-5.792	1.00	8.05	A
	ATOM	3870	O	ALA	A	493	54.453	71.436	-6.290	1.00	7.12	A
	ATOM	3871	N	LEU	A	494	52.802	72.948	-6.501	1.00	8.32	A
	ATOM	3872	CA	LEU	A	494	53.046	73.145	-7.925	1.00	9.14	A
10	ATOM	3873	CB	LEU	A	494	51.979	74.069	-8.530	1.00	9.65	A
	ATOM	3874	CG	LEU	A	494	50.611	73.420	-8.773	1.00	10.02	A
	ATOM	3875	CD1	LEU	A	494	49.579	74.489	-9.132	1.00	10.77	A
	ATOM	3876	CD2	LEU	A	494	50.729	72.390	-9.889	1.00	10.73	A
15	ATOM	3877	C	LEU	A	494	54.437	73.726	-8.145	1.00	9.07	A
	ATOM	3878	O	LEU	A	494	55.158	73.297	-9.043	1.00	9.80	A
	ATOM	3879	N	LYS	A	495	54.816	74.694	-7.315	1.00	9.88	A
	ATOM	3880	CA	LYS	A	495	56.137	75.307	-7.427	1.00	10.44	A
20	ATOM	3881	CB	LYS	A	495	56.260	76.494	-6.467	1.00	12.88	A
	ATOM	3882	CG	LYS	A	495	55.346	77.657	-6.831	1.00	16.66	A
	ATOM	3883	CD	LYS	A	495	55.583	78.879	-5.955	1.00	19.89	A
	ATOM	3884	CE	LYS	A	495	55.238	78.611	-4.501	1.00	21.23	A
25	ATOM	3885	NZ	LYS	A	495	55.445	79.824	-3.656	1.00	23.31	A
	ATOM	3886	C	LYS	A	495	57.221	74.273	-7.138	1.00	10.02	A
	ATOM	3887	O	LYS	A	495	58.268	74.260	-7.788	1.00	10.29	A
	ATOM	3888	N	ALA	A	496	56.965	73.397	-6.170	1.00	8.63	A
30	ATOM	3889	CA	ALA	A	496	57.923	72.351	-5.832	1.00	8.27	A
	ATOM	3890	CB	ALA	A	496	57.433	71.564	-4.613	1.00	9.05	A
	ATOM	3891	C	ALA	A	496	58.094	71.419	-7.037	1.00	8.71	A
	ATOM	3892	O	ALA	A	496	59.211	71.028	-7.387	1.00	8.19	A
35	ATOM	3893	N	CYS	A	497	56.982	71.068	-7.676	1.00	8.28	A
	ATOM	3894	CA	CYS	A	497	57.032	70.192	-8.838	1.00	8.42	A
	ATOM	3895	CB	CYS	A	497	55.618	69.845	-9.313	1.00	7.83	A
	ATOM	3896	SG	CYS	A	497	54.759	68.649	-8.261	1.00	8.61	A
40	ATOM	3897	C	CYS	A	497	57.813	70.848	-9.970	1.00	8.81	A
	ATOM	3898	O	CYS	A	497	58.639	70.207	-10.615	1.00	8.25	A
	ATOM	3899	N	GLN	A	498	57.550	72.126	-10.212	1.00	8.64	A
	ATOM	3900	CA	GLN	A	498	58.248	72.843	-11.272	1.00	10.15	A
45	ATOM	3901	CB	GLN	A	498	57.765	74.293	-11.355	1.00	11.26	A
	ATOM	3902	CG	GLN	A	498	58.576	75.132	-12.335	1.00	14.98	A
	ATOM	3903	CD	GLN	A	498	58.111	76.573	-12.423	1.00	17.06	A
	ATOM	3904	OE1	GLN	A	498	58.033	77.280	-11.412	1.00	19.34	A
50	ATOM	3905	NE2	GLN	A	498	57.814	77.023	-13.636	1.00	16.12	A
	ATOM	3906	C	GLN	A	498	59.755	72.824	-11.040	1.00	10.31	A
	ATOM	3907	O	GLN	A	498	60.532	72.590	-11.966	1.00	9.65	A
	ATOM	3908	N	MSE	A	499	60.165	73.080	-9.801	1.00	9.78	A
55	ATOM	3909	CA	MSE	A	499	61.580	73.090	-9.457	1.00	11.48	A
	ATOM	3910	CB	MSE	A	499	61.751	73.411	-7.968	1.00	15.37	A
	ATOM	3911	CG	MSE	A	499	63.163	73.223	-7.420	1.00	19.93	A
	ATOM	3912	SE	MSE	A	499	64.512	74.312	-8.276	1.00	30.03	A
55	ATOM	3913	CE	MSE	A	499	63.919	76.038	-7.664	1.00	24.23	A
	ATOM	3914	C	MSE	A	499	62.226	71.748	-9.783	1.00	10.06	A
	ATOM	3915	O	MSE	A	499	63.261	71.689	-10.445	1.00	9.59	A
	ATOM	3916	N	VAL	A	500	61.602	70.665	-9.328	1.00	9.10	A
	ATOM	3917	CA	VAL	A	500	62.134	69.336	-9.572	1.00	8.89	A

5	ATOM	3918	CB	VAL	A	500	61.310	68.274	-8.814	1.00	8.59	A
	ATOM	3919	CG1	VAL	A	500	61.761	66.871	-9.206	1.00	8.21	A
	ATOM	3920	CG2	VAL	A	500	61.473	68.486	-7.316	1.00	10.28	A
	ATOM	3921	C	VAL	A	500	62.156	69.009	-11.062	1.00	8.51	A
	ATOM	3922	O	VAL	A	500	63.149	68.495	-11.573	1.00	9.06	A
10	ATOM	3923	N	MSE	A	501	61.063	69.307	-11.752	1.00	8.86	A
	ATOM	3924	CA	MSE	A	501	60.975	69.037	-13.181	1.00	8.89	A
	ATOM	3925	CB	MSE	A	501	59.589	69.427	-13.698	1.00	11.27	A
	ATOM	3926	CG	MSE	A	501	58.472	68.543	-13.164	1.00	12.53	A
	ATOM	3927	SE	MSE	A	501	56.723	69.312	-13.426	1.00	20.16	A
15	ATOM	3928	CE	MSE	A	501	56.544	69.004	-15.314	1.00	15.92	A
	ATOM	3929	C	MSE	A	501	62.051	69.751	-13.993	1.00	8.69	A
	ATOM	3930	O	MSE	A	501	62.750	69.124	-14.793	1.00	8.53	A
	ATOM	3931	N	GLN	A	502	62.193	71.057	-13.793	1.00	9.61	A
	ATOM	3932	CA	GLN	A	502	63.183	71.813	-14.551	1.00	9.86	A
20	ATOM	3933	CB	GLN	A	502	62.972	73.318	-14.351	1.00	10.38	A
	ATOM	3934	CG	GLN	A	502	63.229	73.852	-12.958	1.00	10.99	A
	ATOM	3935	CD	GLN	A	502	64.644	74.356	-12.798	1.00	11.92	A
	ATOM	3936	OE1	GLN	A	502	65.370	74.510	-13.782	1.00	11.67	A
	ATOM	3937	NE2	GLN	A	502	65.042	74.633	-11.563	1.00	12.62	A
25	ATOM	3938	C	GLN	A	502	64.620	71.396	-14.236	1.00	10.24	A
	ATOM	3939	O	GLN	A	502	65.463	71.366	-15.131	1.00	9.31	A
	ATOM	3940	N	GLN	A	503	64.909	71.062	-12.980	1.00	9.34	A
	ATOM	3941	CA	GLN	A	503	66.260	70.608	-12.642	1.00	10.05	A
	ATOM	3942	CB	GLN	A	503	66.408	70.369	-11.135	1.00	10.04	A
30	ATOM	3943	CG	GLN	A	503	66.626	71.616	-10.285	1.00	11.30	A
	ATOM	3944	CD	GLN	A	503	67.985	72.265	-10.503	1.00	12.37	A
	ATOM	3945	OE1	GLN	A	503	68.979	71.588	-10.775	1.00	13.68	A
	ATOM	3946	NE2	GLN	A	503	68.035	73.582	-10.354	1.00	12.98	A
	ATOM	3947	C	GLN	A	503	66.520	69.291	-13.374	1.00	9.96	A
35	ATOM	3948	O	GLN	A	503	67.617	69.048	-13.876	1.00	10.50	A
	ATOM	3949	N	SER	A	504	65.502	68.435	-13.425	1.00	9.59	A
	ATOM	3950	CA	SER	A	504	65.628	67.141	-14.085	1.00	9.96	A
	ATOM	3951	CB	SER	A	504	64.380	66.291	-13.824	1.00	10.16	A
	ATOM	3952	OG	SER	A	504	64.243	66.012	-12.440	1.00	9.72	A
40	ATOM	3953	C	SER	A	504	65.848	67.280	-15.584	1.00	9.31	A
	ATOM	3954	O	SER	A	504	66.690	66.589	-16.159	1.00	8.89	A
	ATOM	3955	N	VAL	A	505	65.089	68.167	-16.219	1.00	9.28	A
	ATOM	3956	CA	VAL	A	505	65.229	68.371	-17.655	1.00	9.59	A
	ATOM	3957	CB	VAL	A	505	64.202	69.399	-18.175	1.00	9.08	A
45	ATOM	3958	CG1	VAL	A	505	64.522	69.782	-19.618	1.00	9.37	A
	ATOM	3959	CG2	VAL	A	505	62.800	68.807	-18.095	1.00	9.95	A
	ATOM	3960	C	VAL	A	505	66.640	68.849	-17.987	1.00	9.71	A
	ATOM	3961	O	VAL	A	505	67.260	68.376	-18.940	1.00	10.10	A
	ATOM	3962	N	TYR	A	506	67.154	69.778	-17.193	1.00	9.87	A
50	ATOM	3963	CA	TYR	A	506	68.492	70.293	-17.438	1.00	11.11	A
	ATOM	3964	CB	TYR	A	506	68.830	71.384	-16.423	1.00	12.61	A
	ATOM	3965	CG	TYR	A	506	70.105	72.117	-16.747	1.00	14.68	A
	ATOM	3966	CD1	TYR	A	506	70.239	72.809	-17.951	1.00	15.77	A
	ATOM	3967	CE1	TYR	A	506	71.413	73.469	-18.275	1.00	17.48	A
55	ATOM	3968	CD2	TYR	A	506	71.184	72.103	-15.868	1.00	15.76	A
	ATOM	3969	CE2	TYR	A	506	72.375	72.762	-16.185	1.00	17.87	A
	ATOM	3970	CZ	TYR	A	506	72.475	73.442	-17.390	1.00	17.40	A
	ATOM	3971	OH	TYR	A	506	73.631	74.107	-17.715	1.00	19.63	A
	ATOM	3972	C	TYR	A	506	69.536	69.173	-17.370	1.00	11.07	A

	ATOM	3973	O	TYR	A	506	70.433	69.091	-18.208	1.00	11.91	A
	ATOM	3974	N	ARG	A	507	69.409	68.297	-16.381	1.00	10.61	A
	ATOM	3975	CA	ARG	A	507	70.360	67.198	-16.233	1.00	10.72	A
	ATOM	3976	CB	ARG	A	507	70.183	66.538	-14.863	1.00	11.26	A
5	ATOM	3977	CG	ARG	A	507	71.244	65.498	-14.526	1.00	12.91	A
	ATOM	3978	CD	ARG	A	507	71.069	64.994	-13.106	1.00	13.23	A
	ATOM	3979	NE	ARG	A	507	72.063	63.986	-12.746	1.00	15.07	A
	ATOM	3980	CZ	ARG	A	507	72.164	63.442	-11.536	1.00	15.08	A
10	ATOM	3981	NH1	ARG	A	507	71.334	63.813	-10.572	1.00	15.72	A
	ATOM	3982	NH2	ARG	A	507	73.081	62.514	-11.294	1.00	16.84	A
	ATOM	3983	C	ARG	A	507	70.219	66.148	-17.339	1.00	10.75	A
	ATOM	3984	O	ARG	A	507	71.211	65.609	-17.829	1.00	10.91	A
	ATOM	3985	N	LEU	A	508	68.983	65.863	-17.734	1.00	9.85	A
15	ATOM	3986	CA	LEU	A	508	68.726	64.865	-18.769	1.00	10.20	A
	ATOM	3987	CB	LEU	A	508	67.242	64.483	-18.766	1.00	9.54	A
	ATOM	3988	CG	LEU	A	508	66.755	63.648	-17.574	1.00	9.24	A
	ATOM	3989	CD1	LEU	A	508	65.238	63.747	-17.461	1.00	9.92	A
	ATOM	3990	CD2	LEU	A	508	67.205	62.206	-17.737	1.00	10.33	A
20	ATOM	3991	C	LEU	A	508	69.120	65.287	-20.182	1.00	9.83	A
	ATOM	3992	O	LEU	A	508	69.387	64.434	-21.035	1.00	10.94	A
	ATOM	3993	N	LEU	A	509	69.159	66.593	-20.436	1.00	10.67	A
	ATOM	3994	CA	LEU	A	509	69.484	67.089	-21.768	1.00	10.38	A
	ATOM	3995	CB	LEU	A	509	68.299	67.893	-22.320	1.00	9.95	A
25	ATOM	3996	CG	LEU	A	509	67.025	67.078	-22.584	1.00	8.90	A
	ATOM	3997	CD1	LEU	A	509	65.900	68.010	-23.009	1.00	8.36	A
	ATOM	3998	CD2	LEU	A	509	67.289	66.029	-23.659	1.00	10.74	A
	ATOM	3999	C	LEU	A	509	70.763	67.910	-21.897	1.00	11.19	A
	ATOM	4000	O	LEU	A	509	70.928	68.652	-22.863	1.00	11.27	A
30	ATOM	4001	N	THR	A	510	71.673	67.781	-20.938	1.00	11.02	A
	ATOM	4002	CA	THR	A	510	72.930	68.516	-21.011	1.00	11.45	A
	ATOM	4003	CB	THR	A	510	73.089	69.481	-19.814	1.00	11.70	A
	ATOM	4004	OG1	THR	A	510	72.005	70.417	-19.815	1.00	10.96	A
	ATOM	4005	CG2	THR	A	510	74.408	70.253	-19.904	1.00	11.60	A
35	ATOM	4006	C	THR	A	510	74.092	67.533	-21.029	1.00	12.46	A
	ATOM	4007	O	THR	A	510	74.105	66.568	-20.266	1.00	12.49	A
	ATOM	4008	N	LYS	A	511	75.055	67.772	-21.915	1.00	13.67	A
	ATOM	4009	CA	LYS	A	511	76.217	66.897	-22.012	1.00	15.49	A
	ATOM	4010	CB	LYS	A	511	77.275	67.512	-22.930	1.00	17.27	A
40	ATOM	4011	CG	LYS	A	511	78.509	66.643	-23.110	1.00	20.21	A
	ATOM	4012	CD	LYS	A	511	79.482	67.269	-24.092	1.00	22.41	A
	ATOM	4013	CE	LYS	A	511	80.704	66.388	-24.290	1.00	24.44	A
	ATOM	4014	NZ	LYS	A	511	81.639	66.957	-25.300	1.00	26.86	A
	ATOM	4015	C	LYS	A	511	76.774	66.718	-20.608	1.00	15.51	A
45	ATOM	4016	O	LYS	A	511	77.049	67.692	-19.908	1.00	14.86	A
	ATOM	4017	N	PRO	A	512	76.943	65.460	-20.175	1.00	16.19	A
	ATOM	4018	CD	PRO	A	512	76.648	64.242	-20.952	1.00	16.95	A
	ATOM	4019	CA	PRO	A	512	77.457	65.111	-18.849	1.00	16.40	A
	ATOM	4020	CB	PRO	A	512	77.744	63.620	-18.983	1.00	17.38	A
50	ATOM	4021	CG	PRO	A	512	76.652	63.172	-19.886	1.00	17.83	A
	ATOM	4022	C	PRO	A	512	78.669	65.890	-18.347	1.00	16.31	A
	ATOM	4023	O	PRO	A	512	78.664	66.387	-17.223	1.00	16.51	A
	ATOM	4024	N	SER	A	513	79.701	66.000	-19.177	1.00	16.07	A
	ATOM	4025	CA	SER	A	513	80.920	66.701	-18.778	1.00	16.40	A
	ATOM	4026	CB	SER	A	513	82.074	66.309	-19.708	1.00	16.21	A
55	ATOM	4027	OG	SER	A	513	81.769	66.605	-21.058	1.00	17.37	A

5	ATOM	4028	C	SER	A	513	80.796	68.221	-18.727	1.00	16.15	A
	ATOM	4029	O	SER	A	513	81.738	68.910	-18.335	1.00	16.45	A
	ATOM	4030	N	ILE	A	514	79.637	68.740	-19.121	1.00	15.99	A
	ATOM	4031	CA	ILE	A	514	79.391	70.179	-19.110	1.00	15.87	A
	ATOM	4032	CB	ILE	A	514	78.813	70.659	-20.468	1.00	16.66	A
10	ATOM	4033	CG2	ILE	A	514	78.339	72.106	-20.355	1.00	17.47	A
	ATOM	4034	CG1	ILE	A	514	79.874	70.512	-21.563	1.00	17.94	A
	ATOM	4035	CD1	ILE	A	514	79.427	70.989	-22.933	1.00	19.29	A
	ATOM	4036	C	ILE	A	514	78.410	70.538	-17.993	1.00	15.13	A
	ATOM	4037	O	ILE	A	514	78.466	71.630	-17.428	1.00	14.53	A
15	ATOM	4038	N	TYR	A	515	77.522	69.601	-17.679	1.00	14.27	A
	ATOM	4039	CA	TYR	A	515	76.510	69.778	-16.638	1.00	13.78	A
	ATOM	4040	CB	TYR	A	515	75.831	68.428	-16.389	1.00	13.76	A
	ATOM	4041	CG	TYR	A	515	74.793	68.410	-15.295	1.00	13.28	A
	ATOM	4042	CD1	TYR	A	515	73.628	69.168	-15.392	1.00	12.14	A
20	ATOM	4043	CE1	TYR	A	515	72.649	69.112	-14.395	1.00	12.51	A
	ATOM	4044	CD2	TYR	A	515	74.961	67.598	-14.177	1.00	13.33	A
	ATOM	4045	CE2	TYR	A	515	73.999	67.534	-13.182	1.00	12.19	A
	ATOM	4046	CZ	TYR	A	515	72.846	68.290	-13.295	1.00	12.93	A
	ATOM	4047	OH	TYR	A	515	71.893	68.211	-12.308	1.00	13.77	A
25	ATOM	4048	C	TYR	A	515	77.104	70.331	-15.338	1.00	13.79	A
	ATOM	4049	O	TYR	A	515	77.937	69.687	-14.703	1.00	13.97	A
	ATOM	4050	N	SER	A	516	76.669	71.528	-14.951	1.00	14.47	A
	ATOM	4051	CA	SER	A	516	77.152	72.183	-13.733	1.00	15.55	A
	ATOM	4052	CB	SER	A	516	78.192	73.248	-14.091	1.00	16.76	A
30	ATOM	4053	OG	SER	A	516	78.809	73.768	-12.928	1.00	18.55	A
	ATOM	4054	C	SER	A	516	75.948	72.833	-13.059	1.00	16.14	A
	ATOM	4055	O	SER	A	516	75.719	74.037	-13.184	1.00	16.36	A
	ATOM	4056	N	PRO	A	517	75.166	72.037	-12.315	1.00	16.21	A
	ATOM	4057	CD	PRO	A	517	75.323	70.583	-12.117	1.00	16.72	A
35	ATOM	4058	CA	PRO	A	517	73.971	72.522	-11.630	1.00	16.81	A
	ATOM	4059	CB	PRO	A	517	73.208	71.234	-11.345	1.00	16.87	A
	ATOM	4060	CG	PRO	A	517	74.317	70.294	-11.013	1.00	16.68	A
	ATOM	4061	C	PRO	A	517	74.067	73.387	-10.382	1.00	17.01	A
	ATOM	4062	O	PRO	A	517	74.914	73.182	-9.513	1.00	18.50	A
40	ATOM	4063	N	ASP	A	518	73.169	74.364	-10.331	1.00	17.32	A
	ATOM	4064	CA	ASP	A	518	72.998	75.251	-9.191	1.00	17.65	A
	ATOM	4065	CB	ASP	A	518	72.942	76.716	-9.619	1.00	18.97	A
	ATOM	4066	CG	ASP	A	518	72.657	77.650	-8.454	1.00	20.40	A
	ATOM	4067	OD1	ASP	A	518	72.026	77.206	-7.469	1.00	20.68	A
45	ATOM	4068	OD2	ASP	A	518	73.048	78.833	-8.523	1.00	21.51	A
	ATOM	4069	C	ASP	A	518	71.597	74.788	-8.807	1.00	16.83	A
	ATOM	4070	O	ASP	A	518	70.624	75.139	-9.471	1.00	16.54	A
	ATOM	4071	N	PHE	A	519	71.495	73.982	-7.757	1.00	16.46	A
	ATOM	4072	CA	PHE	A	519	70.205	73.440	-7.348	1.00	16.01	A
50	ATOM	4073	CB	PHE	A	519	70.415	72.389	-6.256	1.00	15.82	A
	ATOM	4074	CG	PHE	A	519	71.267	71.229	-6.697	1.00	15.47	A
	ATOM	4075	CD1	PHE	A	519	70.980	70.553	-7.881	1.00	15.02	A
	ATOM	4076	CD2	PHE	A	519	72.352	70.811	-5.932	1.00	15.53	A
	ATOM	4077	CE1	PHE	A	519	71.759	69.481	-8.298	1.00	14.89	A
55	ATOM	4078	CE2	PHE	A	519	73.138	69.736	-6.341	1.00	15.39	A
	ATOM	4079	CZ	PHE	A	519	72.841	69.071	-7.525	1.00	15.53	A
	ATOM	4080	C	PHE	A	519	69.136	74.442	-6.925	1.00	16.61	A
	ATOM	4081	O	PHE	A	519	68.004	74.057	-6.638	1.00	16.65	A
	ATOM	4082	N	SER	A	520	69.479	75.724	-6.898	1.00	17.10	A

	ATOM	4083	CA	SER	A	520	68.510	76.751	-6.523	1.00	17.76	A
	ATOM	4084	CB	SER	A	520	69.097	77.672	-5.453	1.00	18.35	A
	ATOM	4085	OG	SER	A	520	70.142	78.465	-5.993	1.00	20.78	A
5	ATOM	4086	C	SER	A	520	68.138	77.588	-7.744	1.00	17.75	A
	ATOM	4087	O	SER	A	520	67.238	78.427	-7.683	1.00	18.10	A
	ATOM	4088	N	PHE	A	521	68.829	77.340	-8.852	1.00	17.53	A
	ATOM	4089	CA	PHE	A	521	68.620	78.085	-10.088	1.00	17.29	A
	ATOM	4090	CB	PHE	A	521	69.929	78.114	-10.885	1.00	17.61	A
10	ATOM	4091	CG	PHE	A	521	69.910	79.058	-12.053	1.00	18.36	A
	ATOM	4092	CD1	PHE	A	521	69.988	80.433	-11.854	1.00	19.34	A
	ATOM	4093	CD2	PHE	A	521	69.797	78.574	-13.353	1.00	18.76	A
	ATOM	4094	CE1	PHE	A	521	69.953	81.313	-12.933	1.00	19.83	A
	ATOM	4095	CE2	PHE	A	521	69.762	79.445	-14.438	1.00	19.30	A
15	ATOM	4096	CZ	PHE	A	521	69.839	80.818	-14.228	1.00	19.85	A
	ATOM	4097	C	PHE	A	521	67.504	77.534	-10.974	1.00	16.99	A
	ATOM	4098	O	PHE	A	521	67.261	76.328	-11.012	1.00	17.26	A
	ATOM	4099	N	SER	A	522	66.833	78.434	-11.689	1.00	16.98	A
	ATOM	4100	CA	SER	A	522	65.759	78.052	-12.598	1.00	16.45	A
20	ATOM	4101	CB	SER	A	522	64.590	79.036	-12.496	1.00	18.00	A
	ATOM	4102	OG	SER	A	522	63.937	78.923	-11.243	1.00	21.58	A
	ATOM	4103	C	SER	A	522	66.282	78.028	-14.033	1.00	14.76	A
	ATOM	4104	O	SER	A	522	66.362	79.066	-14.695	1.00	15.51	A
	ATOM	4105	N	TYR	A	523	66.646	76.839	-14.503	1.00	13.04	A
25	ATOM	4106	CA	TYR	A	523	67.155	76.676	-15.860	1.00	12.11	A
	ATOM	4107	CB	TYR	A	523	67.879	75.338	-16.003	1.00	12.66	A
	ATOM	4108	CG	TYR	A	523	69.152	75.276	-15.205	1.00	12.36	A
	ATOM	4109	CD1	TYR	A	523	69.172	74.722	-13.926	1.00	11.48	A
	ATOM	4110	CE1	TYR	A	523	70.337	74.718	-13.167	1.00	13.82	A
30	ATOM	4111	CD2	TYR	A	523	70.331	75.824	-15.707	1.00	12.94	A
	ATOM	4112	CE2	TYR	A	523	71.497	75.828	-14.957	1.00	13.68	A
	ATOM	4113	CZ	TYR	A	523	71.493	75.275	-13.688	1.00	14.52	A
	ATOM	4114	OH	TYR	A	523	72.642	75.297	-12.932	1.00	15.63	A
	ATOM	4115	C	TYR	A	523	66.028	76.753	-16.870	1.00	12.04	A
35	ATOM	4116	O	TYR	A	523	66.232	77.175	-18.009	1.00	11.26	A
	ATOM	4117	N	PHE	A	524	64.840	76.332	-16.449	1.00	11.79	A
	ATOM	4118	CA	PHE	A	524	63.664	76.371	-17.306	1.00	11.61	A
	ATOM	4119	CB	PHE	A	524	63.287	74.984	-17.836	1.00	11.49	A
	ATOM	4120	CG	PHE	A	524	64.319	74.353	-18.715	1.00	10.85	A
40	ATOM	4121	CD1	PHE	A	524	65.356	73.609	-18.166	1.00	11.04	A
	ATOM	4122	CD2	PHE	A	524	64.241	74.482	-20.098	1.00	11.26	A
	ATOM	4123	CE1	PHE	A	524	66.300	72.998	-18.982	1.00	11.78	A
	ATOM	4124	CE2	PHE	A	524	65.179	73.876	-20.924	1.00	10.39	A
	ATOM	4125	CZ	PHE	A	524	66.211	73.132	-20.364	1.00	11.02	A
45	ATOM	4126	C	PHE	A	524	62.466	76.873	-16.528	1.00	13.17	A
	ATOM	4127	O	PHE	A	524	62.380	76.701	-15.311	1.00	13.07	A
	ATOM	4128	N	THR	A	525	61.540	77.479	-17.255	1.00	14.04	A
	ATOM	4129	CA	THR	A	525	60.298	77.967	-16.686	1.00	15.95	A
	ATOM	4130	CB	THR	A	525	60.069	79.455	-17.014	1.00	17.37	A
50	ATOM	4131	OG1	THR	A	525	61.109	80.242	-16.417	1.00	21.08	A
	ATOM	4132	CG2	THR	A	525	58.725	79.917	-16.480	1.00	20.26	A
	ATOM	4133	C	THR	A	525	59.206	77.138	-17.356	1.00	14.82	A
	ATOM	4134	O	THR	A	525	59.222	76.953	-18.575	1.00	14.60	A
	ATOM	4135	N	LEU	A	526	58.276	76.616	-16.565	1.00	14.08	A
55	ATOM	4136	CA	LEU	A	526	57.184	75.830	-17.122	1.00	14.04	A
	ATOM	4137	CB	LEU	A	526	56.468	75.030	-16.029	1.00	14.91	A

	ATOM	4138	CG	LEU	A	526	56.977	73.638	-15.661	1.00	16.17	A
	ATOM	4139	CD1	LEU	A	526	56.169	73.104	-14.483	1.00	17.46	A
	ATOM	4140	CD2	LEU	A	526	56.844	72.710	-16.858	1.00	16.37	A
5	ATOM	4141	C	LEU	A	526	56.176	76.754	-17.785	1.00	13.66	A
	ATOM	4142	O	LEU	A	526	55.864	77.825	-17.265	1.00	15.13	A
	ATOM	4143	N	ASP	A	527	55.675	76.339	-18.941	1.00	12.47	A
	ATOM	4144	CA	ASP	A	527	54.671	77.113	-19.644	1.00	12.88	A
	ATOM	4145	CB	ASP	A	527	55.142	77.470	-21.055	1.00	13.45	A
10	ATOM	4146	CG	ASP	A	527	54.139	78.332	-21.797	1.00	15.23	A
	ATOM	4147	OD1	ASP	A	527	53.873	79.462	-21.335	1.00	15.10	A
	ATOM	4148	OD2	ASP	A	527	53.612	77.881	-22.837	1.00	16.86	A
	ATOM	4149	C	ASP	A	527	53.444	76.221	-19.715	1.00	12.90	A
	ATOM	4150	O	ASP	A	527	53.486	75.152	-20.315	1.00	14.82	A
15	ATOM	4151	N	ASP	A	528	52.363	76.651	-19.079	1.00	12.04	A
	ATOM	4152	CA	ASP	A	528	51.126	75.879	-19.064	1.00	11.43	A
	ATOM	4153	CB	ASP	A	528	50.757	75.525	-17.622	1.00	11.67	A
	ATOM	4154	CG	ASP	A	528	49.732	74.413	-17.538	1.00	11.75	A
	ATOM	4155	OD1	ASP	A	528	48.723	74.470	-18.271	1.00	11.28	A
20	ATOM	4156	OD2	ASP	A	528	49.935	73.486	-16.729	1.00	11.32	A
	ATOM	4157	C	ASP	A	528	50.039	76.744	-19.687	1.00	11.92	A
	ATOM	4158	O	ASP	A	528	49.701	77.793	-19.157	1.00	10.88	A
	ATOM	4159	N	SER	A	529	49.489	76.300	-20.811	1.00	12.60	A
	ATOM	4160	CA	SER	A	529	48.468	77.083	-21.491	1.00	13.59	A
25	ATOM	4161	CB	SER	A	529	48.470	76.759	-22.988	1.00	15.60	A
	ATOM	4162	OG	SER	A	529	48.039	75.431	-23.218	1.00	20.83	A
	ATOM	4163	C	SER	A	529	47.057	76.912	-20.940	1.00	12.92	A
	ATOM	4164	O	SER	A	529	46.164	77.682	-21.287	1.00	14.25	A
	ATOM	4165	N	ARG	A	530	46.843	75.926	-20.074	1.00	11.90	A
30	ATOM	4166	CA	ARG	A	530	45.501	75.711	-19.549	1.00	12.42	A
	ATOM	4167	CB	ARG	A	530	44.964	74.373	-20.060	1.00	11.67	A
	ATOM	4168	CG	ARG	A	530	44.887	74.353	-21.581	1.00	12.07	A
	ATOM	4169	CD	ARG	A	530	44.248	73.092	-22.123	1.00	12.73	A
	ATOM	4170	NE	ARG	A	530	44.981	71.897	-21.729	1.00	12.73	A
35	ATOM	4171	CZ	ARG	A	530	44.758	70.691	-22.240	1.00	13.69	A
	ATOM	4172	NH1	ARG	A	530	43.821	70.527	-23.164	1.00	13.80	A
	ATOM	4173	NH2	ARG	A	530	45.476	69.655	-21.832	1.00	14.84	A
	ATOM	4174	C	ARG	A	530	45.327	75.825	-18.041	1.00	12.87	A
	ATOM	4175	O	ARG	A	530	44.268	75.496	-17.507	1.00	14.42	A
40	ATOM	4176	N	TRP	A	531	46.365	76.285	-17.354	1.00	12.16	A
	ATOM	4177	CA	TRP	A	531	46.272	76.496	-15.915	1.00	12.56	A
	ATOM	4178	CB	TRP	A	531	46.546	75.221	-15.115	1.00	13.21	A
	ATOM	4179	CG	TRP	A	531	46.479	75.516	-13.647	1.00	13.89	A
	ATOM	4180	CD2	TRP	A	531	45.292	75.619	-12.853	1.00	15.00	A
45	ATOM	4181	CE2	TRP	A	531	45.683	76.062	-11.570	1.00	14.42	A
	ATOM	4182	CE3	TRP	A	531	43.934	75.385	-13.103	1.00	14.98	A
	ATOM	4183	CD1	TRP	A	531	47.516	75.883	-12.831	1.00	14.62	A
	ATOM	4184	NE1	TRP	A	531	47.045	76.214	-11.585	1.00	16.00	A
	ATOM	4185	CZ2	TRP	A	531	44.763	76.275	-10.537	1.00	15.89	A
50	ATOM	4186	CZ3	TRP	A	531	43.019	75.598	-12.078	1.00	15.43	A
	ATOM	4187	CH2	TRP	A	531	43.440	76.039	-10.811	1.00	15.65	A
	ATOM	4188	C	TRP	A	531	47.239	77.578	-15.454	1.00	13.17	A
	ATOM	4189	O	TRP	A	531	48.436	77.495	-15.708	1.00	13.12	A
	ATOM	4190	N	PRO	A	532	46.728	78.603	-14.753	1.00	13.97	A
	ATOM	4191	CD	PRO	A	532	47.581	79.550	-14.016	1.00	14.36	A
55	ATOM	4192	CA	PRO	A	532	45.319	78.790	-14.388	1.00	14.97	A

5	ATOM	4193	CB	PRO	A	532	45.360	80.011	-13.472	1.00	14.79	A
	ATOM	4194	CG	PRO	A	532	46.709	79.897	-12.832	1.00	14.98	A
	ATOM	4195	C	PRO	A	532	44.433	79.009	-15.610	1.00	16.32	A
	ATOM	4196	O	PRO	A	532	43.214	78.863	-15.538	1.00	16.43	A
	ATOM	4197	N	GLY	A	533	45.058	79.363	-16.729	1.00	18.09	A
10	ATOM	4198	CA	GLY	A	533	44.313	79.573	-17.956	1.00	20.35	A
	ATOM	4199	C	GLY	A	533	44.110	81.021	-18.355	1.00	22.43	A
	ATOM	4200	O	GLY	A	533	44.136	81.924	-17.517	1.00	21.90	A
	ATOM	4201	N	SER	A	534	43.908	81.236	-19.650	1.00	24.34	A
	ATOM	4202	CA	SER	A	534	43.684	82.574	-20.183	1.00	26.30	A
15	ATOM	4203	CB	SER	A	534	43.577	82.517	-21.709	1.00	27.62	A
	ATOM	4204	OG	SER	A	534	43.326	83.801	-22.252	1.00	29.22	A
	ATOM	4205	C	SER	A	534	42.396	83.135	-19.593	1.00	26.95	A
	ATOM	4206	O	SER	A	534	41.366	82.461	-19.579	1.00	27.04	A
	ATOM	4207	N	GLY	A	535	42.458	84.369	-19.104	1.00	27.48	A
20	ATOM	4208	CA	GLY	A	535	41.282	84.985	-18.516	1.00	28.19	A
	ATOM	4209	C	GLY	A	535	41.168	84.676	-17.036	1.00	28.77	A
	ATOM	4210	O	GLY	A	535	40.300	85.208	-16.342	1.00	28.75	A
	ATOM	4211	N	VAL	A	536	42.047	83.805	-16.551	1.00	28.86	A
	ATOM	4212	CA	VAL	A	536	42.054	83.429	-15.144	1.00	29.39	A
25	ATOM	4213	CB	VAL	A	536	42.205	81.900	-14.973	1.00	29.14	A
	ATOM	4214	CG1	VAL	A	536	42.127	81.526	-13.500	1.00	28.72	A
	ATOM	4215	CG2	VAL	A	536	41.120	81.183	-15.759	1.00	28.88	A
	ATOM	4216	C	VAL	A	536	43.222	84.126	-14.457	1.00	30.17	A
	ATOM	4217	O	VAL	A	536	43.062	84.745	-13.405	1.00	29.60	A
30	ATOM	4218	N	GLU	A	537	44.399	84.026	-15.065	1.00	31.25	A
	ATOM	4219	CA	GLU	A	537	45.595	84.651	-14.517	1.00	32.73	A
	ATOM	4220	CB	GLU	A	537	46.093	83.859	-13.303	1.00	33.69	A
	ATOM	4221	CG	GLU	A	537	47.378	84.400	-12.690	1.00	35.24	A
	ATOM	4222	CD	GLU	A	537	47.769	83.681	-11.411	1.00	36.16	A
35	ATOM	4223	OE1	GLU	A	537	48.825	84.023	-10.836	1.00	36.68	A
	ATOM	4224	OE2	GLU	A	537	47.023	82.777	-10.977	1.00	36.57	A
	ATOM	4225	C	GLU	A	537	46.702	84.738	-15.560	1.00	33.20	A
	ATOM	4226	O	GLU	A	537	47.132	83.720	-16.101	1.00	33.31	A
	ATOM	4227	N	ASP	A	538	47.156	85.953	-15.852	1.00	33.93	A
40	ATOM	4228	CA	ASP	A	538	48.236	86.131	-16.816	1.00	34.52	A
	ATOM	4229	CB	ASP	A	538	48.368	87.600	-17.225	1.00	36.03	A
	ATOM	4230	CG	ASP	A	538	49.455	87.816	-18.263	1.00	37.32	A
	ATOM	4231	OD1	ASP	A	538	49.350	87.232	-19.362	1.00	37.91	A
	ATOM	4232	OD2	ASP	A	538	50.414	88.565	-17.979	1.00	38.51	A
45	ATOM	4233	C	ASP	A	538	49.500	85.677	-16.103	1.00	33.98	A
	ATOM	4234	O	ASP	A	538	50.185	86.474	-15.462	1.00	34.26	A
	ATOM	4235	N	SER	A	539	49.798	84.388	-16.212	1.00	32.86	A
	ATOM	4236	CA	SER	A	539	50.958	83.813	-15.547	1.00	31.79	A
	ATOM	4237	CB	SER	A	539	50.523	82.598	-14.725	1.00	31.81	A
50	ATOM	4238	OG	SER	A	539	49.889	81.634	-15.551	1.00	32.64	A
	ATOM	4239	C	SER	A	539	52.093	83.405	-16.477	1.00	30.65	A
	ATOM	4240	O	SER	A	539	53.264	83.579	-16.142	1.00	30.92	A
	ATOM	4241	N	ARG	A	540	51.755	82.858	-17.640	1.00	29.09	A
	ATOM	4242	CA	ARG	A	540	52.784	82.416	-18.571	1.00	26.85	A
55	ATOM	4243	CB	ARG	A	540	52.164	81.572	-19.691	1.00	26.27	A
	ATOM	4244	CG	ARG	A	540	50.972	82.187	-20.384	1.00	24.91	A
	ATOM	4245	CD	ARG	A	540	50.198	81.126	-21.168	1.00	21.40	A
	ATOM	4246	NE	ARG	A	540	51.053	80.373	-22.084	1.00	18.78	A
	ATOM	4247	CZ	ARG	A	540	50.621	79.799	-23.203	1.00	18.16	A

5	ATOM	4248	NH1	ARG	A	540	49.343	79.892	-23.549	1.00	17.98	A
	ATOM	4249	NH2	ARG	A	540	51.468	79.143	-23.983	1.00	17.24	A
	ATOM	4250	C	ARG	A	540	53.627	83.550	-19.139	1.00	25.67	A
	ATOM	4251	O	ARG	A	540	53.131	84.638	-19.438	1.00	26.07	A
	ATOM	4252	N	THR	A	541	54.919	83.275	-19.269	1.00	23.91	A
	ATOM	4253	CA	THR	A	541	55.877	84.246	-19.767	1.00	22.62	A
	ATOM	4254	CB	THR	A	541	57.299	83.885	-19.316	1.00	23.68	A
	ATOM	4255	OG1	THR	A	541	57.696	82.662	-19.945	1.00	24.78	A
10	ATOM	4256	CG2	THR	A	541	57.352	83.702	-17.808	1.00	23.48	A
	ATOM	4257	C	THR	A	541	55.887	84.337	-21.283	1.00	20.98	A
	ATOM	4258	O	THR	A	541	55.492	83.405	-21.982	1.00	21.78	A
	ATOM	4259	N	THR	A	542	56.345	85.477	-21.782	1.00	18.43	A
15	ATOM	4260	CA	THR	A	542	56.448	85.695	-23.211	1.00	16.38	A
	ATOM	4261	CB	THR	A	542	56.098	87.151	-23.592	1.00	16.52	A
	ATOM	4262	OG1	THR	A	542	54.729	87.420	-23.269	1.00	16.56	A
	ATOM	4263	CG2	THR	A	542	56.322	87.383	-25.081	1.00	16.03	A
	ATOM	4264	C	THR	A	542	57.900	85.445	-23.577	1.00	14.95	A
20	ATOM	4265	O	THR	A	542	58.808	85.888	-22.870	1.00	14.70	A
	ATOM	4266	N	ILE	A	543	58.124	84.710	-24.658	1.00	13.40	A
	ATOM	4267	CA	ILE	A	543	59.482	84.463	-25.110	1.00	12.55	A
	ATOM	4268	CB	ILE	A	543	59.553	83.220	-26.014	1.00	12.30	A
	ATOM	4269	CG2	ILE	A	543	60.943	83.095	-26.627	1.00	12.36	A
25	ATOM	4270	CG1	ILE	A	543	59.200	81.973	-25.190	1.00	12.14	A
	ATOM	4271	CD1	ILE	A	543	59.126	80.694	-25.997	1.00	11.44	A
	ATOM	4272	C	ILE	A	543	59.838	85.723	-25.893	1.00	13.00	A
	ATOM	4273	O	ILE	A	543	59.273	85.990	-26.954	1.00	13.68	A
	ATOM	4274	N	ILE	A	544	60.753	86.510	-25.340	1.00	13.31	A
30	ATOM	4275	CA	ILE	A	544	61.158	87.762	-25.958	1.00	13.70	A
	ATOM	4276	CB	ILE	A	544	61.448	88.825	-24.875	1.00	14.36	A
	ATOM	4277	CG2	ILE	A	544	61.862	90.134	-25.521	1.00	15.40	A
	ATOM	4278	CG1	ILE	A	544	60.192	89.038	-24.022	1.00	15.13	A
	ATOM	4279	CD1	ILE	A	544	60.359	90.045	-22.898	1.00	17.93	A
35	ATOM	4280	C	ILE	A	544	62.370	87.590	-26.862	1.00	14.58	A
	ATOM	4281	O	ILE	A	544	63.464	87.254	-26.407	1.00	14.06	A
	ATOM	4282	N	LEU	A	545	62.148	87.812	-28.153	1.00	14.60	A
	ATOM	4283	CA	LEU	A	545	63.195	87.691	-29.157	1.00	14.96	A
	ATOM	4284	CB	LEU	A	545	62.841	86.592	-30.162	1.00	14.72	A
40	ATOM	4285	CG	LEU	A	545	62.557	85.197	-29.596	1.00	14.29	A
	ATOM	4286	CD1	LEU	A	545	62.158	84.259	-30.725	1.00	14.25	A
	ATOM	4287	CD2	LEU	A	545	63.792	84.672	-28.877	1.00	13.93	A
	ATOM	4288	C	LEU	A	545	63.345	89.019	-29.887	1.00	15.87	A
	ATOM	4289	O	LEU	A	545	62.393	89.791	-29.988	1.00	16.34	A
45	ATOM	4290	N	GLY	A	546	64.544	89.275	-30.395	1.00	16.68	A
	ATOM	4291	CA	GLY	A	546	64.795	90.512	-31.111	1.00	18.01	A
	ATOM	4292	C	GLY	A	546	66.227	90.584	-31.597	1.00	19.27	A
	ATOM	4293	O	GLY	A	546	67.138	90.083	-30.942	1.00	17.83	A
	ATOM	4294	N	GLU	A	547	66.426	91.220	-32.745	1.00	21.14	A
50	ATOM	4295	CA	GLU	A	547	67.754	91.359	-33.334	1.00	23.92	A
	ATOM	4296	CB	GLU	A	547	67.679	92.234	-34.586	1.00	27.11	A
	ATOM	4297	CG	GLU	A	547	66.677	91.771	-35.625	1.00	32.07	A
	ATOM	4298	CD	GLU	A	547	66.480	92.796	-36.725	1.00	34.39	A
	ATOM	4299	OE1	GLU	A	547	67.457	93.089	-37.449	1.00	35.80	A
55	ATOM	4300	OE2	GLU	A	547	65.350	93.314	-36.862	1.00	35.52	A
	ATOM	4301	C	GLU	A	547	68.756	91.980	-32.368	1.00	23.56	A
	ATOM	4302	O	GLU	A	547	69.926	91.600	-32.342	1.00	24.12	A

5	ATOM	4303	N	ASP	A	548	68.291	92.939	-31.574	1.00	22.91	A
	ATOM	4304	CA	ASP	A	548	69.159	93.634	-30.630	1.00	22.77	A
	ATOM	4305	CB	ASP	A	548	68.772	95.114	-30.561	1.00	23.80	A
	ATOM	4306	CG	ASP	A	548	68.956	95.830	-31.884	1.00	24.78	A
	ATOM	4307	OD1	ASP	A	548	70.097	95.863	-32.391	1.00	26.00	A
	ATOM	4308	OD2	ASP	A	548	67.959	96.363	-32.416	1.00	25.77	A
	ATOM	4309	C	ASP	A	548	69.159	93.058	-29.220	1.00	22.13	A
	ATOM	4310	O	ASP	A	548	69.669	93.692	-28.295	1.00	22.21	A
10	ATOM	4311	N	ILE	A	549	68.600	91.866	-29.039	1.00	20.62	A
	ATOM	4312	CA	ILE	A	549	68.570	91.286	-27.702	1.00	19.69	A
	ATOM	4313	CB	ILE	A	549	67.253	91.667	-26.967	1.00	20.73	A
	ATOM	4314	CG2	ILE	A	549	66.047	91.126	-27.720	1.00	20.71	A
	ATOM	4315	CG1	ILE	A	549	67.280	91.132	-25.535	1.00	21.62	A
15	ATOM	4316	CD1	ILE	A	549	68.364	91.745	-24.675	1.00	23.70	A
	ATOM	4317	C	ILE	A	549	68.758	89.771	-27.647	1.00	18.85	A
	ATOM	4318	O	ILE	A	549	69.579	89.276	-26.875	1.00	18.42	A
	ATOM	4319	N	LEU	A	550	68.011	89.038	-28.466	1.00	17.47	A
	ATOM	4320	CA	LEU	A	550	68.104	87.580	-28.473	1.00	16.89	A
20	ATOM	4321	CB	LEU	A	550	67.420	87.014	-27.227	1.00	17.32	A
	ATOM	4322	CG	LEU	A	550	67.461	85.495	-27.058	1.00	17.26	A
	ATOM	4323	CD1	LEU	A	550	68.903	85.039	-26.909	1.00	17.29	A
	ATOM	4324	CD2	LEU	A	550	66.649	85.096	-25.838	1.00	17.14	A
	ATOM	4325	C	LEU	A	550	67.444	87.015	-29.724	1.00	16.51	A
25	ATOM	4326	O	LEU	A	550	66.238	87.160	-29.920	1.00	16.78	A
	ATOM	4327	N	PRO	A	551	68.226	86.351	-30.587	1.00	16.11	A
	ATOM	4328	CD	PRO	A	551	69.696	86.234	-30.567	1.00	16.87	A
	ATOM	4329	CA	PRO	A	551	67.675	85.783	-31.819	1.00	15.76	A
	ATOM	4330	CB	PRO	A	551	68.915	85.591	-32.688	1.00	16.77	A
30	ATOM	4331	CG	PRO	A	551	69.962	85.248	-31.690	1.00	18.35	A
	ATOM	4332	C	PRO	A	551	66.849	84.502	-31.705	1.00	14.86	A
	ATOM	4333	O	PRO	A	551	65.944	84.279	-32.509	1.00	15.49	A
	ATOM	4334	N	SER	A	552	67.152	83.661	-30.722	1.00	13.64	A
	ATOM	4335	CA	SER	A	552	66.415	82.407	-30.589	1.00	12.75	A
35	ATOM	4336	CB	SER	A	552	67.084	81.317	-31.425	1.00	13.26	A
	ATOM	4337	OG	SER	A	552	68.373	81.018	-30.924	1.00	15.05	A
	ATOM	4338	C	SER	A	552	66.276	81.919	-29.156	1.00	11.84	A
	ATOM	4339	O	SER	A	552	66.931	82.422	-28.246	1.00	11.84	A
	ATOM	4340	N	LYS	A	553	65.422	80.917	-28.979	1.00	10.82	A
40	ATOM	4341	CA	LYS	A	553	65.153	80.350	-27.667	1.00	11.24	A
	ATOM	4342	CB	LYS	A	553	63.958	81.071	-27.037	1.00	11.54	A
	ATOM	4343	CG	LYS	A	553	63.441	80.440	-25.742	1.00	12.80	A
	ATOM	4344	CD	LYS	A	553	64.467	80.532	-24.630	1.00	13.25	A
	ATOM	4345	CE	LYS	A	553	64.703	81.972	-24.200	1.00	13.22	A
45	ATOM	4346	NZ	LYS	A	553	65.871	82.085	-23.281	1.00	14.05	A
	ATOM	4347	C	LYS	A	553	64.843	78.861	-27.746	1.00	10.65	A
	ATOM	4348	O	LYS	A	553	64.058	78.422	-28.588	1.00	10.51	A
	ATOM	4349	N	HIS	A	554	65.464	78.088	-26.863	1.00	10.75	A
	ATOM	4350	CA	HIS	A	554	65.211	76.656	-26.817	1.00	11.14	A
50	ATOM	4351	CB	HIS	A	554	66.426	75.894	-26.282	1.00	12.98	A
	ATOM	4352	CG	HIS	A	554	67.562	75.806	-27.250	1.00	14.49	A
	ATOM	4353	CD2	HIS	A	554	68.093	76.726	-28.088	1.00	16.00	A
	ATOM	4354	ND1	HIS	A	554	68.315	74.662	-27.410	1.00	17.03	A
	ATOM	4355	CE1	HIS	A	554	69.261	74.883	-28.305	1.00	14.97	A
55	ATOM	4356	NE2	HIS	A	554	69.148	76.128	-28.732	1.00	18.38	A
	ATOM	4357	C	HIS	A	554	64.028	76.358	-25.906	1.00	10.44	A

5	ATOM	4358	O	HIS	A	554	63.874	76.972	-24.848	1.00	10.76	A
	ATOM	4359	N	VAL	A	555	63.194	75.422	-26.340	1.00	10.09	A
	ATOM	4360	CA	VAL	A	555	62.049	74.971	-25.562	1.00	9.37	A
	ATOM	4361	CB	VAL	A	555	60.697	75.425	-26.165	1.00	9.28	A
	ATOM	4362	CG1	VAL	A	555	60.560	76.934	-26.045	1.00	9.53	A
10	ATOM	4363	CG2	VAL	A	555	60.584	74.987	-27.613	1.00	9.57	A
	ATOM	4364	C	VAL	A	555	62.123	73.452	-25.554	1.00	9.23	A
	ATOM	4365	O	VAL	A	555	62.656	72.849	-26.485	1.00	9.24	A
	ATOM	4366	N	VAL	A	556	61.601	72.836	-24.499	1.00	7.97	A
	ATOM	4367	CA	VAL	A	556	61.629	71.385	-24.368	1.00	7.89	A
15	ATOM	4368	CB	VAL	A	556	62.664	70.944	-23.299	1.00	7.99	A
	ATOM	4369	CG1	VAL	A	556	62.584	69.440	-23.078	1.00	7.88	A
	ATOM	4370	CG2	VAL	A	556	64.066	71.352	-23.717	1.00	9.27	A
	ATOM	4371	C	VAL	A	556	60.266	70.857	-23.940	1.00	7.33	A
	ATOM	4372	O	VAL	A	556	59.616	71.443	-23.077	1.00	7.50	A
20	ATOM	4373	N	MSE	A	557	59.840	69.757	-24.551	1.00	7.30	A
	ATOM	4374	CA	MSE	A	557	58.571	69.130	-24.197	1.00	8.38	A
	ATOM	4375	CB	MSE	A	557	57.688	68.912	-25.433	1.00	9.38	A
	ATOM	4376	CG	MSE	A	557	56.636	69.984	-25.676	1.00	12.19	A
	ATOM	4377	SE	MSE	A	557	57.378	71.731	-25.960	1.00	17.55	A
25	ATOM	4378	CE	MSE	A	557	58.381	71.378	-27.570	1.00	13.47	A
	ATOM	4379	C	MSE	A	557	58.824	67.782	-23.543	1.00	8.15	A
	ATOM	4380	O	MSE	A	557	59.712	67.037	-23.955	1.00	8.86	A
	ATOM	4381	N	HIS	A	558	58.040	67.482	-22.515	1.00	7.51	A
	ATOM	4382	CA	HIS	A	558	58.134	66.204	-21.823	1.00	6.67	A
30	ATOM	4383	CB	HIS	A	558	58.318	66.401	-20.318	1.00	7.78	A
	ATOM	4384	CG	HIS	A	558	58.239	65.129	-19.529	1.00	7.30	A
	ATOM	4385	CD2	HIS	A	558	58.985	63.999	-19.577	1.00	7.61	A
	ATOM	4386	ND1	HIS	A	558	57.301	64.926	-18.539	1.00	7.80	A
	ATOM	4387	CE1	HIS	A	558	57.473	63.727	-18.012	1.00	7.28	A
35	ATOM	4388	NE2	HIS	A	558	58.489	63.143	-18.623	1.00	7.93	A
	ATOM	4389	C	HIS	A	558	56.845	65.433	-22.061	1.00	7.17	A
	ATOM	4390	O	HIS	A	558	55.757	66.011	-22.049	1.00	6.98	A
	ATOM	4391	N	ASN	A	559	56.976	64.129	-22.283	1.00	6.57	A
	ATOM	4392	CA	ASN	A	559	55.832	63.253	-22.511	1.00	6.63	A
40	ATOM	4393	CB	ASN	A	559	55.926	62.621	-23.905	1.00	7.17	A
	ATOM	4394	CG	ASN	A	559	54.910	61.516	-24.119	1.00	7.78	A
	ATOM	4395	OD1	ASN	A	559	53.821	61.540	-23.550	1.00	8.71	A
	ATOM	4396	ND2	ASN	A	559	55.261	60.542	-24.960	1.00	8.27	A
	ATOM	4397	C	ASN	A	559	55.857	62.165	-21.443	1.00	6.46	A
45	ATOM	4398	O	ASN	A	559	56.619	61.210	-21.545	1.00	7.32	A
	ATOM	4399	N	THR	A	560	55.015	62.306	-20.425	1.00	6.42	A
	ATOM	4400	CA	THR	A	560	54.983	61.336	-19.335	1.00	7.03	A
	ATOM	4401	CB	THR	A	560	54.219	61.925	-18.120	1.00	6.72	A
	ATOM	4402	OG1	THR	A	560	54.541	61.177	-16.940	1.00	6.98	A
50	ATOM	4403	CG2	THR	A	560	52.720	61.877	-18.350	1.00	7.05	A
	ATOM	4404	C	THR	A	560	54.390	59.969	-19.714	1.00	7.51	A
	ATOM	4405	O	THR	A	560	54.588	58.982	-18.999	1.00	7.07	A
	ATOM	4406	N	LEU	A	561	53.674	59.904	-20.835	1.00	7.49	A
	ATOM	4407	CA	LEU	A	561	53.065	58.646	-21.273	1.00	7.71	A
55	ATOM	4408	CB	LEU	A	561	51.904	58.925	-22.233	1.00	8.47	A
	ATOM	4409	CG	LEU	A	561	50.776	59.818	-21.701	1.00	9.12	A
	ATOM	4410	CD1	LEU	A	561	49.724	60.008	-22.787	1.00	9.86	A
	ATOM	4411	CD2	LEU	A	561	50.147	59.187	-20.462	1.00	7.91	A
	ATOM	4412	C	LEU	A	561	54.089	57.728	-21.949	1.00	7.77	A

5	ATOM	4413	O	LEU	A	561	54.993	58.196	-22.649	1.00	8.16	A
	ATOM	4414	N	PRO	A	562	53.943	56.404	-21.765	1.00	8.25	A
	ATOM	4415	CD	PRO	A	562	52.970	55.743	-20.872	1.00	7.40	A
	ATOM	4416	CA	PRO	A	562	54.862	55.419	-22.346	1.00	8.17	A
	ATOM	4417	CB	PRO	A	562	54.675	54.212	-21.439	1.00	8.14	A
	ATOM	4418	CG	PRO	A	562	53.202	54.266	-21.158	1.00	8.36	A
	ATOM	4419	C	PRO	A	562	54.705	55.064	-23.821	1.00	8.36	A
	ATOM	4420	O	PRO	A	562	54.825	53.902	-24.205	1.00	9.39	A
10	ATOM	4421	N	HIS	A	563	54.422	56.058	-24.649	1.00	8.47	A
	ATOM	4422	CA	HIS	A	563	54.322	55.820	-26.081	1.00	9.07	A
	ATOM	4423	CB	HIS	A	563	52.926	55.308	-26.493	1.00	9.42	A
	ATOM	4424	CG	HIS	A	563	51.790	56.182	-26.058	1.00	10.44	A
15	ATOM	4425	CD2	HIS	A	563	51.289	57.326	-26.582	1.00	9.83	A
	ATOM	4426	ND1	HIS	A	563	50.998	55.881	-24.972	1.00	10.12	A
	ATOM	4427	CE1	HIS	A	563	50.056	56.799	-24.846	1.00	10.52	A
	ATOM	4428	NE2	HIS	A	563	50.210	57.688	-25.811	1.00	10.71	A
20	ATOM	4429	C	HIS	A	563	54.643	57.118	-26.790	1.00	9.23	A
	ATOM	4430	O	HIS	A	563	54.465	58.197	-26.224	1.00	10.26	A
	ATOM	4431	N	TRP	A	564	55.157	57.014	-28.010	1.00	9.71	A
	ATOM	4432	CA	TRP	A	564	55.470	58.210	-28.775	1.00	9.67	A
	ATOM	4433	CB	TRP	A	564	55.966	57.858	-30.177	1.00	10.28	A
	ATOM	4434	CG	TRP	A	564	57.389	57.435	-30.214	1.00	10.78	A
	ATOM	4435	CD2	TRP	A	564	58.527	58.285	-30.382	1.00	12.00	A
	ATOM	4436	CE2	TRP	A	564	59.674	57.461	-30.328	1.00	11.44	A
25	ATOM	4437	CE3	TRP	A	564	58.692	59.667	-30.572	1.00	12.35	A
	ATOM	4438	CD1	TRP	A	564	57.872	56.169	-30.069	1.00	11.14	A
	ATOM	4439	NE1	TRP	A	564	59.243	56.175	-30.137	1.00	11.65	A
	ATOM	4440	CZ2	TRP	A	564	60.972	57.971	-30.458	1.00	12.05	A
30	ATOM	4441	CZ3	TRP	A	564	59.982	60.174	-30.702	1.00	12.66	A
	ATOM	4442	CH2	TRP	A	564	61.105	59.326	-30.645	1.00	13.34	A
	ATOM	4443	C	TRP	A	564	54.198	59.018	-28.889	1.00	9.59	A
	ATOM	4444	O	TRP	A	564	53.116	58.466	-29.107	1.00	10.25	A
35	ATOM	4445	N	ARG	A	565	54.314	60.327	-28.725	1.00	9.71	A
	ATOM	4446	CA	ARG	A	565	53.134	61.160	-28.818	1.00	10.44	A
	ATOM	4447	CB	ARG	A	565	52.547	61.423	-27.418	1.00	10.22	A
	ATOM	4448	CG	ARG	A	565	51.315	62.336	-27.437	1.00	12.89	A
	ATOM	4449	CD	ARG	A	565	50.491	62.296	-26.146	1.00	12.46	A
	ATOM	4450	NE	ARG	A	565	51.287	62.544	-24.949	1.00	12.69	A
	ATOM	4451	CZ	ARG	A	565	50.804	63.063	-23.823	1.00	12.00	A
	ATOM	4452	NH1	ARG	A	565	49.521	63.401	-23.736	1.00	11.76	A
40	ATOM	4453	NH2	ARG	A	565	51.603	63.240	-22.782	1.00	10.34	A
	ATOM	4454	C	ARG	A	565	53.396	62.477	-29.515	1.00	10.54	A
	ATOM	4455	O	ARG	A	565	54.441	63.104	-29.327	1.00	11.41	A
	ATOM	4456	N	GLU	A	566	52.443	62.865	-30.352	1.00	11.57	A
	ATOM	4457	CA	GLU	A	566	52.500	64.139	-31.048	1.00	12.67	A
	ATOM	4458	CB	GLU	A	566	52.281	63.976	-32.551	1.00	14.55	A
	ATOM	4459	CG	GLU	A	566	53.360	63.207	-33.265	1.00	16.81	A
	ATOM	4460	CD	GLU	A	566	53.167	63.239	-34.765	1.00	18.39	A
50	ATOM	4461	OE1	GLU	A	566	52.025	63.017	-35.219	1.00	20.87	A
	ATOM	4462	OE2	GLU	A	566	54.155	63.483	-35.487	1.00	20.56	A
	ATOM	4463	C	GLU	A	566	51.352	64.949	-30.469	1.00	12.51	A
	ATOM	4464	O	GLU	A	566	50.280	64.414	-30.183	1.00	13.17	A
55	ATOM	4465	N	GLN	A	567	51.584	66.238	-30.280	1.00	11.15	A
	ATOM	4466	CA	GLN	A	567	50.559	67.117	-29.744	1.00	11.24	A
	ATOM	4467	CB	GLN	A	567	50.489	67.000	-28.217	1.00	12.08	A

5	ATOM	4468	CG	GLN	A	567	49.477	67.948	-27.579	1.00	11.81	A
	ATOM	4469	CD	GLN	A	567	49.819	68.294	-26.141	1.00	12.83	A
	ATOM	4470	OE1	GLN	A	567	49.777	67.441	-25.255	1.00	11.48	A
	ATOM	4471	NE2	GLN	A	567	50.171	69.553	-25.905	1.00	14.01	A
	ATOM	4472	C	GLN	A	567	50.941	68.533	-30.116	1.00	10.61	A
10	ATOM	4473	O	GLN	A	567	52.122	68.879	-30.126	1.00	10.26	A
	ATOM	4474	N	LEU	A	568	49.951	69.349	-30.451	1.00	10.33	A
	ATOM	4475	CA	LEU	A	568	50.247	70.734	-30.766	1.00	9.94	A
	ATOM	4476	CB	LEU	A	568	49.051	71.439	-31.410	1.00	11.28	A
	ATOM	4477	CG	LEU	A	568	48.657	71.080	-32.842	1.00	11.61	A
15	ATOM	4478	CD1	LEU	A	568	47.653	72.113	-33.339	1.00	12.59	A
	ATOM	4479	CD2	LEU	A	568	49.884	71.073	-33.745	1.00	12.50	A
	ATOM	4480	C	LEU	A	568	50.568	71.426	-29.452	1.00	10.03	A
	ATOM	4481	O	LEU	A	568	49.926	71.171	-28.430	1.00	10.24	A
	ATOM	4482	N	VAL	A	569	51.581	72.279	-29.477	1.00	8.96	A
20	ATOM	4483	CA	VAL	A	569	51.965	73.042	-28.300	1.00	9.33	A
	ATOM	4484	CB	VAL	A	569	53.331	72.585	-27.724	1.00	8.58	A
	ATOM	4485	CG1	VAL	A	569	53.201	71.179	-27.135	1.00	9.88	A
	ATOM	4486	CG2	VAL	A	569	54.402	72.607	-28.808	1.00	9.77	A
	ATOM	4487	C	VAL	A	569	52.046	74.503	-28.716	1.00	9.59	A
25	ATOM	4488	O	VAL	A	569	52.314	74.815	-29.877	1.00	10.28	A
	ATOM	4489	N	ASP	A	570	51.790	75.405	-27.779	1.00	9.31	A
	ATOM	4490	CA	ASP	A	570	51.846	76.820	-28.108	1.00	10.77	A
	ATOM	4491	CB	ASP	A	570	50.434	77.409	-28.195	1.00	12.92	A
	ATOM	4492	CG	ASP	A	570	49.759	77.514	-26.841	1.00	16.24	A
30	ATOM	4493	OD1	ASP	A	570	49.620	76.479	-26.159	1.00	20.02	A
	ATOM	4494	OD2	ASP	A	570	49.367	78.635	-26.459	1.00	20.35	A
	ATOM	4495	C	ASP	A	570	52.662	77.594	-27.093	1.00	10.43	A
	ATOM	4496	O	ASP	A	570	52.761	77.208	-25.928	1.00	11.33	A
	ATOM	4497	N	PHE	A	571	53.267	78.681	-27.558	1.00	10.09	A
35	ATOM	4498	CA	PHE	A	571	54.069	79.546	-26.704	1.00	10.04	A
	ATOM	4499	CB	PHE	A	571	55.569	79.321	-26.929	1.00	10.14	A
	ATOM	4500	CG	PHE	A	571	56.064	77.980	-26.482	1.00	9.15	A
	ATOM	4501	CD1	PHE	A	571	56.053	76.891	-27.344	1.00	8.69	A
	ATOM	4502	CD2	PHE	A	571	56.544	77.809	-25.190	1.00	9.56	A
40	ATOM	4503	CE1	PHE	A	571	56.517	75.645	-26.921	1.00	9.22	A
	ATOM	4504	CE2	PHE	A	571	57.006	76.570	-24.758	1.00	8.84	A
	ATOM	4505	CZ	PHE	A	571	56.991	75.489	-25.628	1.00	9.29	A
	ATOM	4506	C	PHE	A	571	53.761	80.984	-27.075	1.00	10.51	A
	ATOM	4507	O	PHE	A	571	53.379	81.263	-28.212	1.00	11.02	A
45	ATOM	4508	N	TYR	A	572	53.918	81.890	-26.114	1.00	10.59	A
	ATOM	4509	CA	TYR	A	572	53.721	83.308	-26.381	1.00	11.05	A
	ATOM	4510	CB	TYR	A	572	53.298	84.069	-25.123	1.00	12.13	A
	ATOM	4511	CG	TYR	A	572	51.862	83.889	-24.686	1.00	14.07	A
	ATOM	4512	CD1	TYR	A	572	50.897	83.376	-25.550	1.00	14.81	A
50	ATOM	4513	CE1	TYR	A	572	49.562	83.266	-25.154	1.00	15.92	A
	ATOM	4514	CD2	TYR	A	572	51.461	84.286	-23.412	1.00	16.47	A
	ATOM	4515	CE2	TYR	A	572	50.135	84.184	-23.009	1.00	16.38	A
	ATOM	4516	CZ	TYR	A	572	49.191	83.676	-23.882	1.00	16.81	A
	ATOM	4517	OH	TYR	A	572	47.874	83.592	-23.481	1.00	17.51	A
55	ATOM	4518	C	TYR	A	572	55.078	83.839	-26.826	1.00	11.07	A
	ATOM	4519	O	TYR	A	572	56.094	83.557	-26.188	1.00	10.80	A
	ATOM	4520	N	VAL	A	573	55.096	84.596	-27.920	1.00	10.87	A
	ATOM	4521	CA	VAL	A	573	56.335	85.174	-28.438	1.00	11.44	A
	ATOM	4522	CB	VAL	A	573	56.782	84.475	-29.745	1.00	11.72	A

5	ATOM	4523	CG1	VAL	A	573	57.329	83.084	-29.429	1.00	11.99	A
	ATOM	4524	CG2	VAL	A	573	55.613	84.371	-30.710	1.00	12.32	A
	ATOM	4525	C	VAL	A	573	56.135	86.667	-28.699	1.00	11.37	A
	ATOM	4526	O	VAL	A	573	55.021	87.107	-28.967	1.00	12.01	A
	ATOM	4527	N	SER	A	574	57.218	87.435	-28.624	1.00	12.19	A
	ATOM	4528	CA	SER	A	574	57.156	88.885	-28.817	1.00	13.05	A
	ATOM	4529	CB	SER	A	574	58.338	89.554	-28.117	1.00	13.31	A
	ATOM	4530	OG	SER	A	574	59.566	89.132	-28.680	1.00	13.02	A
10	ATOM	4531	C	SER	A	574	57.116	89.347	-30.270	1.00	13.99	A
	ATOM	4532	O	SER	A	574	57.090	90.550	-30.538	1.00	15.54	A
	ATOM	4533	N	SER	A	575	57.120	88.402	-31.203	1.00	14.20	A
	ATOM	4534	CA	SER	A	575	57.071	88.732	-32.621	1.00	14.88	A
15	ATOM	4535	CB	SER	A	575	58.483	88.846	-33.197	1.00	15.07	A
	ATOM	4536	OG	SER	A	575	58.440	88.996	-34.607	1.00	16.15	A
	ATOM	4537	C	SER	A	575	56.312	87.661	-33.387	1.00	14.98	A
	ATOM	4538	O	SER	A	575	56.349	86.488	-33.027	1.00	14.24	A
	ATOM	4539	N	PRO	A	576	55.599	88.055	-34.450	1.00	15.06	A
20	ATOM	4540	CD	PRO	A	576	55.309	89.435	-34.884	1.00	15.77	A
	ATOM	4541	CA	PRO	A	576	54.845	87.084	-35.244	1.00	14.91	A
	ATOM	4542	CB	PRO	A	576	53.797	87.950	-35.929	1.00	15.59	A
	ATOM	4543	CG	PRO	A	576	54.558	89.221	-36.184	1.00	16.60	A
	ATOM	4544	C	PRO	A	576	55.763	86.385	-36.246	1.00	14.44	A
25	ATOM	4545	O	PRO	A	576	55.411	85.360	-36.821	1.00	14.89	A
	ATOM	4546	N	PHE	A	577	56.951	86.948	-36.443	1.00	14.84	A
	ATOM	4547	CA	PHE	A	577	57.912	86.400	-37.390	1.00	15.08	A
	ATOM	4548	CB	PHE	A	577	58.680	87.546	-38.050	1.00	16.28	A
	ATOM	4549	CG	PHE	A	577	57.790	88.549	-38.732	1.00	18.45	A
30	ATOM	4550	CD1	PHE	A	577	58.042	89.913	-38.617	1.00	19.42	A
	ATOM	4551	CD2	PHE	A	577	56.699	88.131	-39.487	1.00	18.51	A
	ATOM	4552	CE1	PHE	A	577	57.218	90.847	-39.243	1.00	20.70	A
	ATOM	4553	CE2	PHE	A	577	55.867	89.059	-40.119	1.00	20.04	A
	ATOM	4554	CZ	PHE	A	577	56.129	90.418	-39.995	1.00	20.44	A
35	ATOM	4555	C	PHE	A	577	58.870	85.440	-36.703	1.00	14.78	A
	ATOM	4556	O	PHE	A	577	60.053	85.728	-36.528	1.00	14.56	A
	ATOM	4557	N	VAL	A	578	58.335	84.288	-36.317	1.00	14.00	A
	ATOM	4558	CA	VAL	A	578	59.112	83.268	-35.635	1.00	14.21	A
	ATOM	4559	CB	VAL	A	578	58.641	83.116	-34.172	1.00	14.17	A
40	ATOM	4560	CG1	VAL	A	578	59.412	82.000	-33.481	1.00	14.20	A
	ATOM	4561	CG2	VAL	A	578	58.840	84.429	-33.431	1.00	14.11	A
	ATOM	4562	C	VAL	A	578	58.971	81.932	-36.352	1.00	13.94	A
	ATOM	4563	O	VAL	A	578	57.887	81.567	-36.806	1.00	14.31	A
	ATOM	4564	N	SER	A	579	60.083	81.218	-36.465	1.00	14.83	A
45	ATOM	4565	CA	SER	A	579	60.096	79.920	-37.117	1.00	14.80	A
	ATOM	4566	CB	SER	A	579	60.997	79.956	-38.356	1.00	16.06	A
	ATOM	4567	OG	SER	A	579	62.294	80.415	-38.032	1.00	19.90	A
	ATOM	4568	C	SER	A	579	60.588	78.875	-36.127	1.00	14.00	A
	ATOM	4569	O	SER	A	579	61.340	79.188	-35.204	1.00	13.81	A
50	ATOM	4570	N	VAL	A	580	60.157	77.637	-36.326	1.00	12.34	A
	ATOM	4571	CA	VAL	A	580	60.528	76.542	-35.444	1.00	12.09	A
	ATOM	4572	CB	VAL	A	580	59.269	75.835	-34.898	1.00	11.61	A
	ATOM	4573	CG1	VAL	A	580	59.662	74.778	-33.871	1.00	11.03	A
	ATOM	4574	CG2	VAL	A	580	58.321	76.858	-34.284	1.00	10.91	A
55	ATOM	4575	C	VAL	A	580	61.388	75.498	-36.144	1.00	12.49	A
	ATOM	4576	O	VAL	A	580	61.185	75.192	-37.320	1.00	13.11	A
	ATOM	4577	N	THR	A	581	62.347	74.956	-35.402	1.00	12.19	A

5	ATOM	4578	CA	THR	A	581	63.236	73.911	-35.894	1.00	13.34	A
	ATOM	4579	CB	THR	A	581	64.618	74.470	-36.315	1.00	13.96	A
	ATOM	4580	OG1	THR	A	581	65.119	75.344	-35.295	1.00	15.16	A
	ATOM	4581	CG2	THR	A	581	64.516	75.220	-37.632	1.00	13.79	A
	ATOM	4582	C	THR	A	581	63.465	72.918	-34.762	1.00	14.12	A
10	ATOM	4583	O	THR	A	581	63.316	73.269	-33.593	1.00	13.78	A
	ATOM	4584	N	ASP	A	582	63.791	71.676	-35.104	1.00	15.79	A
	ATOM	4585	CA	ASP	A	582	64.086	70.687	-34.075	1.00	17.41	A
	ATOM	4586	CB	ASP	A	582	63.674	69.271	-34.522	1.00	17.61	A
	ATOM	4587	CG	ASP	A	582	64.382	68.801	-35.782	1.00	17.96	A
15	ATOM	4588	OD1	ASP	A	582	63.942	67.774	-36.345	1.00	19.58	A
	ATOM	4589	OD2	ASP	A	582	65.367	69.434	-36.205	1.00	17.28	A
	ATOM	4590	C	ASP	A	582	65.592	70.831	-33.866	1.00	19.39	A
	ATOM	4591	O	ASP	A	582	66.209	71.675	-34.512	1.00	18.93	A
	ATOM	4592	N	LEU	A	583	66.205	70.052	-32.983	1.00	21.85	A
20	ATOM	4593	CA	LEU	A	583	67.636	70.251	-32.777	1.00	23.92	A
	ATOM	4594	CB	LEU	A	583	68.138	69.489	-31.549	1.00	25.99	A
	ATOM	4595	CG	LEU	A	583	69.423	70.140	-31.024	1.00	27.28	A
	ATOM	4596	CD1	LEU	A	583	69.104	71.550	-30.548	1.00	28.01	A
	ATOM	4597	CD2	LEU	A	583	70.019	69.329	-29.898	1.00	28.61	A
25	ATOM	4598	C	LEU	A	583	68.491	69.897	-33.988	1.00	24.12	A
	ATOM	4599	O	LEU	A	583	69.615	70.385	-34.120	1.00	25.14	A
	ATOM	4600	N	ALA	A	584	67.965	69.055	-34.873	1.00	23.00	A
	ATOM	4601	CA	ALA	A	584	68.703	68.680	-36.074	1.00	21.20	A
	ATOM	4602	CB	ALA	A	584	68.157	67.380	-36.649	1.00	21.31	A
30	ATOM	4603	C	ALA	A	584	68.561	69.808	-37.091	1.00	20.45	A
	ATOM	4604	O	ALA	A	584	68.994	69.693	-38.237	1.00	19.17	A
	ATOM	4605	N	ASN	A	585	67.944	70.901	-36.651	1.00	20.39	A
	ATOM	4606	CA	ASN	A	585	67.725	72.075	-37.487	1.00	20.49	A
	ATOM	4607	CB	ASN	A	585	69.052	72.580	-38.058	1.00	22.80	A
35	ATOM	4608	CG	ASN	A	585	69.389	73.979	-37.585	1.00	24.67	A
	ATOM	4609	OD1	ASN	A	585	68.643	74.928	-37.833	1.00	25.57	A
	ATOM	4610	ND2	ASN	A	585	70.514	74.114	-36.891	1.00	26.67	A
	ATOM	4611	C	ASN	A	585	66.727	71.848	-38.616	1.00	19.93	A
	ATOM	4612	O	ASN	A	585	66.715	72.592	-39.603	1.00	20.20	A
40	ATOM	4613	N	ASN	A	586	65.894	70.822	-38.473	1.00	18.43	A
	ATOM	4614	CA	ASN	A	586	64.872	70.525	-39.471	1.00	17.78	A
	ATOM	4615	CB	ASN	A	586	64.329	69.101	-39.317	1.00	18.38	A
	ATOM	4616	CG	ASN	A	586	65.396	68.045	-39.465	1.00	18.83	A
	ATOM	4617	OD1	ASN	A	586	66.205	68.089	-40.388	1.00	18.59	A
45	ATOM	4618	ND2	ASN	A	586	65.392	67.073	-38.560	1.00	18.31	A
	ATOM	4619	C	ASN	A	586	63.720	71.492	-39.241	1.00	17.17	A
	ATOM	4620	O	ASN	A	586	63.244	71.640	-38.118	1.00	15.87	A
	ATOM	4621	N	PRO	A	587	63.261	72.173	-40.296	1.00	16.47	A
	ATOM	4622	CD	PRO	A	587	63.673	72.155	-41.710	1.00	17.25	A
50	ATOM	4623	CA	PRO	A	587	62.149	73.099	-40.080	1.00	15.85	A
	ATOM	4624	CB	PRO	A	587	61.983	73.762	-41.447	1.00	16.75	A
	ATOM	4625	CG	PRO	A	587	62.443	72.697	-42.400	1.00	17.77	A
	ATOM	4626	C	PRO	A	587	60.894	72.354	-39.630	1.00	14.91	A
	ATOM	4627	O	PRO	A	587	60.666	71.203	-40.009	1.00	15.09	A
55	ATOM	4628	N	VAL	A	588	60.096	73.008	-38.795	1.00	13.83	A
	ATOM	4629	CA	VAL	A	588	58.857	72.428	-38.298	1.00	13.91	A
	ATOM	4630	CB	VAL	A	588	58.902	72.242	-36.764	1.00	14.00	A
	ATOM	4631	CG1	VAL	A	588	57.570	71.711	-36.263	1.00	14.23	A
	ATOM	4632	CG2	VAL	A	588	60.028	71.285	-36.390	1.00	13.60	A

5	ATOM	4633	C	VAL	A	588	57.733	73.395	-38.655	1.00	13.82	A
	ATOM	4634	O	VAL	A	588	57.829	74.590	-38.371	1.00	13.34	A
	ATOM	4635	N	GLU	A	589	56.677	72.886	-39.282	1.00	14.01	A
	ATOM	4636	CA	GLU	A	589	55.559	73.740	-39.666	1.00	14.78	A
	ATOM	4637	CB	GLU	A	589	54.492	72.945	-40.417	1.00	16.78	A
10	ATOM	4638	CG	GLU	A	589	53.508	73.841	-41.153	1.00	20.93	A
	ATOM	4639	CD	GLU	A	589	52.338	73.083	-41.743	1.00	22.74	A
	ATOM	4640	OE1	GLU	A	589	52.543	71.952	-42.229	1.00	25.02	A
	ATOM	4641	OE2	GLU	A	589	51.213	73.628	-41.733	1.00	24.68	A
	ATOM	4642	C	GLU	A	589	54.940	74.370	-38.428	1.00	14.21	A
15	ATOM	4643	O	GLU	A	589	54.679	73.688	-37.436	1.00	13.85	A
	ATOM	4644	N	ALA	A	590	54.703	75.673	-38.491	1.00	13.29	A
	ATOM	4645	CA	ALA	A	590	54.130	76.387	-37.365	1.00	12.68	A
	ATOM	4646	CB	ALA	A	590	55.215	77.169	-36.643	1.00	12.81	A
	ATOM	4647	C	ALA	A	590	53.026	77.329	-37.804	1.00	12.30	A
20	ATOM	4648	O	ALA	A	590	52.925	77.691	-38.979	1.00	12.10	A
	ATOM	4649	N	GLN	A	591	52.196	77.714	-36.842	1.00	11.58	A
	ATOM	4650	CA	GLN	A	591	51.099	78.640	-37.079	1.00	10.88	A
	ATOM	4651	CB	GLN	A	591	49.746	77.924	-37.004	1.00	11.34	A
	ATOM	4652	CG	GLN	A	591	48.551	78.880	-37.069	1.00	11.63	A
25	ATOM	4653	CD	GLN	A	591	47.220	78.186	-36.836	1.00	11.31	A
	ATOM	4654	OE1	GLN	A	591	46.948	77.136	-37.416	1.00	12.28	A
	ATOM	4655	NE2	GLN	A	591	46.380	78.777	-35.993	1.00	11.76	A
	ATOM	4656	C	GLN	A	591	51.140	79.714	-36.007	1.00	11.07	A
	ATOM	4657	O	GLN	A	591	51.335	79.419	-34.825	1.00	11.93	A
30	ATOM	4658	N	VAL	A	592	50.978	80.966	-36.416	1.00	10.29	A
	ATOM	4659	CA	VAL	A	592	50.960	82.059	-35.461	1.00	11.22	A
	ATOM	4660	CB	VAL	A	592	51.983	83.158	-35.831	1.00	11.59	A
	ATOM	4661	CG1	VAL	A	592	51.742	84.405	-34.990	1.00	12.13	A
	ATOM	4662	CG2	VAL	A	592	53.399	82.641	-35.584	1.00	11.16	A
35	ATOM	4663	C	VAL	A	592	49.550	82.637	-35.433	1.00	11.38	A
	ATOM	4664	O	VAL	A	592	48.935	82.853	-36.477	1.00	12.01	A
	ATOM	4665	N	SER	A	593	49.038	82.848	-34.227	1.00	12.29	A
	ATOM	4666	CA	SER	A	593	47.704	83.399	-34.020	1.00	12.41	A
	ATOM	4667	CB	SER	A	593	46.757	82.337	-33.444	1.00	12.53	A
40	ATOM	4668	OG	SER	A	593	46.554	81.255	-34.339	1.00	13.81	A
	ATOM	4669	C	SER	A	593	47.833	84.533	-33.018	1.00	12.72	A
	ATOM	4670	O	SER	A	593	48.828	84.629	-32.297	1.00	13.46	A
	ATOM	4671	N	PRO	A	594	46.831	85.415	-32.959	1.00	12.94	A
	ATOM	4672	CD	PRO	A	594	45.693	85.588	-33.877	1.00	12.56	A
45	ATOM	4673	CA	PRO	A	594	46.909	86.523	-32.004	1.00	12.57	A
	ATOM	4674	CB	PRO	A	594	45.802	87.471	-32.471	1.00	13.02	A
	ATOM	4675	CG	PRO	A	594	45.560	87.083	-33.915	1.00	12.90	A
	ATOM	4676	C	PRO	A	594	46.641	86.038	-30.583	1.00	12.82	A
	ATOM	4677	O	PRO	A	594	46.185	84.913	-30.374	1.00	12.85	A
50	ATOM	4678	N	VAL	A	595	46.943	86.882	-29.605	1.00	11.95	A
	ATOM	4679	CA	VAL	A	595	46.650	86.549	-28.221	1.00	12.90	A
	ATOM	4680	CB	VAL	A	595	47.761	87.006	-27.249	1.00	12.80	A
	ATOM	4681	CG1	VAL	A	595	47.280	86.842	-25.811	1.00	13.35	A
	ATOM	4682	CG2	VAL	A	595	49.020	86.176	-27.467	1.00	13.76	A
55	ATOM	4683	C	VAL	A	595	45.366	87.315	-27.927	1.00	13.06	A
	ATOM	4684	O	VAL	A	595	45.369	88.545	-27.845	1.00	14.57	A
	ATOM	4685	N	TRP	A	596	44.264	86.583	-27.805	1.00	13.30	A
	ATOM	4686	CA	TRP	A	596	42.967	87.187	-27.539	1.00	14.05	A
	ATOM	4687	CB	TRP	A	596	41.879	86.522	-28.391	1.00	13.01	A

5	ATOM	4688	CG	TRP	A	596	42.037	86.706	-29.862	1.00	13.11	A
	ATOM	4689	CD2	TRP	A	596	41.728	87.883	-30.615	1.00	13.30	A
	ATOM	4690	CE2	TRP	A	596	42.009	87.600	-31.969	1.00	13.52	A
	ATOM	4691	CE3	TRP	A	596	41.241	89.153	-30.275	1.00	13.42	A
	ATOM	4692	CD1	TRP	A	596	42.483	85.780	-30.765	1.00	13.06	A
	ATOM	4693	NE1	TRP	A	596	42.467	86.310	-32.034	1.00	13.17	A
	ATOM	4694	CZ2	TRP	A	596	41.818	88.541	-32.987	1.00	13.38	A
	ATOM	4695	CZ3	TRP	A	596	41.050	90.089	-31.288	1.00	13.71	A
10	ATOM	4696	CH2	TRP	A	596	41.339	89.776	-32.627	1.00	14.26	A
	ATOM	4697	C	TRP	A	596	42.567	87.072	-26.078	1.00	15.30	A
	ATOM	4698	O	TRP	A	596	42.741	86.024	-25.456	1.00	15.31	A
	ATOM	4699	N	SER	A	597	42.027	88.159	-25.540	1.00	16.68	A
15	ATOM	4700	CA	SER	A	597	41.559	88.187	-24.164	1.00	18.42	A
	ATOM	4701	CB	SER	A	597	42.486	89.040	-23.298	1.00	19.42	A
	ATOM	4702	OG	SER	A	597	42.563	90.359	-23.797	1.00	21.78	A
	ATOM	4703	C	SER	A	597	40.160	88.788	-24.185	1.00	18.74	A
	ATOM	4704	O	SER	A	597	39.907	89.768	-24.892	1.00	19.83	A
	ATOM	4705	N	TRP	A	598	39.249	88.194	-23.425	1.00	18.70	A
20	ATOM	4706	CA	TRP	A	598	37.881	88.683	-23.377	1.00	19.40	A
	ATOM	4707	CB	TRP	A	598	36.896	87.515	-23.328	1.00	16.72	A
	ATOM	4708	CG	TRP	A	598	36.870	86.734	-24.603	1.00	14.05	A
	ATOM	4709	CD2	TRP	A	598	35.866	86.791	-25.621	1.00	13.09	A
	ATOM	4710	CE2	TRP	A	598	36.272	85.922	-26.656	1.00	12.49	A
25	ATOM	4711	CE3	TRP	A	598	34.660	87.494	-25.760	1.00	12.76	A
	ATOM	4712	CD1	TRP	A	598	37.817	85.859	-25.048	1.00	13.40	A
	ATOM	4713	NE1	TRP	A	598	37.466	85.366	-26.281	1.00	12.12	A
	ATOM	4714	CZ2	TRP	A	598	35.516	85.734	-27.816	1.00	12.90	A
	ATOM	4715	CZ3	TRP	A	598	33.907	87.306	-26.917	1.00	12.25	A
30	ATOM	4716	CH2	TRP	A	598	34.341	86.433	-27.929	1.00	12.83	A
	ATOM	4717	C	TRP	A	598	37.673	89.595	-22.183	1.00	21.86	A
	ATOM	4718	O	TRP	A	598	38.185	89.340	-21.093	1.00	22.28	A
	ATOM	4719	N	HIS	A	599	36.917	90.663	-22.397	1.00	25.14	A
	ATOM	4720	CA	HIS	A	599	36.662	91.627	-21.341	1.00	29.11	A
35	ATOM	4721	CB	HIS	A	599	37.513	92.875	-21.575	1.00	30.89	A
	ATOM	4722	CG	HIS	A	599	38.982	92.597	-21.638	1.00	32.98	A
	ATOM	4723	CD2	HIS	A	599	39.844	92.597	-22.682	1.00	33.68	A
	ATOM	4724	ND1	HIS	A	599	39.722	92.242	-20.531	1.00	33.67	A
	ATOM	4725	CE1	HIS	A	599	40.977	92.036	-20.890	1.00	34.01	A
40	ATOM	4726	NE2	HIS	A	599	41.078	92.246	-22.190	1.00	34.05	A
	ATOM	4727	C	HIS	A	599	35.197	92.018	-21.262	1.00	31.06	A
	ATOM	4728	O	HIS	A	599	34.520	92.156	-22.281	1.00	30.43	A
	ATOM	4729	N	HIS	A	600	34.712	92.188	-20.037	1.00	33.98	A
	ATOM	4730	CA	HIS	A	600	33.333	92.589	-19.818	1.00	37.06	A
45	ATOM	4731	CB	HIS	A	600	32.835	92.083	-18.463	1.00	38.91	A
	ATOM	4732	CG	HIS	A	600	31.366	92.279	-18.250	1.00	40.97	A
	ATOM	4733	CD2	HIS	A	600	30.390	91.404	-17.910	1.00	41.66	A
	ATOM	4734	ND1	HIS	A	600	30.750	93.504	-18.389	1.00	41.78	A
	ATOM	4735	CE1	HIS	A	600	29.458	93.376	-18.145	1.00	42.26	A
50	ATOM	4736	NE2	HIS	A	600	29.213	92.111	-17.852	1.00	42.52	A
	ATOM	4737	C	HIS	A	600	33.339	94.109	-19.837	1.00	37.98	A
	ATOM	4738	O	HIS	A	600	33.560	94.752	-18.811	1.00	38.39	A
	ATOM	4739	N	ASP	A	601	33.113	94.677	-21.016	1.00	39.04	A
55	ATOM	4740	CA	ASP	A	601	33.108	96.123	-21.185	1.00	40.24	A
	ATOM	4741	CB	ASP	A	601	32.909	96.472	-22.660	1.00	41.10	A
	ATOM	4742	CG	ASP	A	601	33.283	97.906	-22.976	1.00	42.18	A

5	ATOM	4743	OD1	ASP	A	601	32.722	98.825	-22.344	1.00	42.37	A
	ATOM	4744	OD2	ASP	A	601	34.139	98.112	-23.862	1.00	42.54	A
	ATOM	4745	C	ASP	A	601	32.010	96.768	-20.344	1.00	40.49	A
	ATOM	4746	O	ASP	A	601	30.829	96.678	-20.675	1.00	40.39	A
	ATOM	4747	N	THR	A	602	32.413	97.415	-19.254	1.00	40.63	A
	ATOM	4748	CA	THR	A	602	31.476	98.077	-18.352	1.00	40.68	A
	ATOM	4749	CB	THR	A	602	32.200	98.623	-17.102	1.00	41.47	A
	ATOM	4750	OG1	THR	A	602	32.869	97.550	-16.429	1.00	42.23	A
	ATOM	4751	CG2	THR	A	602	31.204	99.271	-16.146	1.00	42.22	A
	ATOM	4752	C	THR	A	602	30.762	99.237	-19.039	1.00	39.69	A
	ATOM	4753	O	THR	A	602	29.652	99.608	-18.656	1.00	40.04	A
	ATOM	4754	N	LEU	A	603	31.404	99.804	-20.056	1.00	38.12	A
	ATOM	4755	CA	LEU	A	603	30.834	100.927	-20.790	1.00	36.37	A
	ATOM	4756	CB	LEU	A	603	31.944	101.732	-21.478	1.00	37.67	A
	ATOM	4757	CG	LEU	A	603	32.888	102.554	-20.593	1.00	38.43	A
	ATOM	4758	CD1	LEU	A	603	32.080	103.570	-19.799	1.00	38.88	A
	ATOM	4759	CD2	LEU	A	603	33.665	101.640	-19.659	1.00	39.02	A
	ATOM	4760	C	LEU	A	603	29.800	100.499	-21.825	1.00	34.34	A
	ATOM	4761	O	LEU	A	603	28.645	100.915	-21.763	1.00	33.94	A
	ATOM	4762	N	THR	A	604	30.217	99.667	-22.775	1.00	31.91	A
10	ATOM	4763	CA	THR	A	604	29.321	99.199	-23.828	1.00	29.56	A
	ATOM	4764	CB	THR	A	604	30.110	98.674	-25.040	1.00	29.91	A
	ATOM	4765	OG1	THR	A	604	30.920	97.561	-24.639	1.00	30.03	A
	ATOM	4766	CG2	THR	A	604	31.004	99.768	-25.608	1.00	29.97	A
	ATOM	4767	C	THR	A	604	28.385	98.092	-23.355	1.00	27.84	A
15	ATOM	4768	O	THR	A	604	27.447	97.722	-24.060	1.00	27.19	A
	ATOM	4769	N	LYS	A	605	28.642	97.567	-22.162	1.00	26.35	A
	ATOM	4770	CA	LYS	A	605	27.819	96.499	-21.605	1.00	25.31	A
	ATOM	4771	CB	LYS	A	605	26.381	96.985	-21.411	1.00	25.79	A
	ATOM	4772	CG	LYS	A	605	26.247	98.128	-20.418	1.00	26.37	A
20	ATOM	4773	CD	LYS	A	605	26.700	97.703	-19.028	1.00	26.73	A
	ATOM	4774	CE	LYS	A	605	26.600	98.853	-18.038	1.00	26.90	A
	ATOM	4775	NZ	LYS	A	605	27.012	98.438	-16.669	1.00	27.43	A
	ATOM	4776	C	LYS	A	605	27.831	95.270	-22.507	1.00	24.34	A
	ATOM	4777	O	LYS	A	605	26.802	94.624	-22.708	1.00	24.15	A
25	ATOM	4778	N	THR	A	606	29.000	94.959	-23.055	1.00	22.88	A
	ATOM	4779	CA	THR	A	606	29.157	93.801	-23.925	1.00	21.84	A
	ATOM	4780	CB	THR	A	606	29.277	94.207	-25.412	1.00	22.73	A
	ATOM	4781	OG1	THR	A	606	30.419	95.057	-25.584	1.00	23.70	A
	ATOM	4782	CG2	THR	A	606	28.024	94.932	-25.873	1.00	23.17	A
30	ATOM	4783	C	THR	A	606	30.417	93.038	-23.545	1.00	20.46	A
	ATOM	4784	O	THR	A	606	31.310	93.575	-22.893	1.00	20.36	A
	ATOM	4785	N	ILE	A	607	30.473	91.775	-23.948	1.00	19.22	A
	ATOM	4786	CA	ILE	A	607	31.627	90.930	-23.678	1.00	18.27	A
	ATOM	4787	CB	ILE	A	607	31.194	89.579	-23.081	1.00	18.14	A
35	ATOM	4788	CG2	ILE	A	607	32.419	88.737	-22.744	1.00	18.10	A
	ATOM	4789	CG1	ILE	A	607	30.362	89.819	-21.818	1.00	18.82	A
	ATOM	4790	CD1	ILE	A	607	29.723	88.569	-21.261	1.00	20.02	A
	ATOM	4791	C	ILE	A	607	32.291	90.705	-25.032	1.00	17.90	A
	ATOM	4792	O	ILE	A	607	31.746	90.012	-25.891	1.00	17.34	A
40	ATOM	4793	N	HIS	A	608	33.458	91.307	-25.229	1.00	17.94	A
	ATOM	4794	CA	HIS	A	608	34.155	91.173	-26.498	1.00	18.20	A
	ATOM	4795	CB	HIS	A	608	33.909	92.409	-27.365	1.00	19.84	A
	ATOM	4796	CG	HIS	A	608	34.468	93.673	-26.792	1.00	21.38	A
	ATOM	4797	CD2	HIS	A	608	35.447	94.494	-27.238	1.00	22.64	A

5	ATOM	4798	ND1	HIS	A	608	34.012	94.225	-25.614	1.00	22.82	A
	ATOM	4799	CE1	HIS	A	608	34.686	95.332	-25.360	1.00	22.93	A
	ATOM	4800	NE2	HIS	A	608	35.563	95.518	-26.330	1.00	23.21	A
	ATOM	4801	C	HIS	A	608	35.649	90.949	-26.317	1.00	17.54	A
	ATOM	4802	O	HIS	A	608	36.212	91.246	-25.262	1.00	17.84	A
10	ATOM	4803	N	PRO	A	609	36.313	90.423	-27.355	1.00	16.61	A
	ATOM	4804	CD	PRO	A	609	35.716	89.852	-28.578	1.00	15.98	A
	ATOM	4805	CA	PRO	A	609	37.748	90.148	-27.310	1.00	16.72	A
	ATOM	4806	CB	PRO	A	609	37.873	88.927	-28.203	1.00	16.83	A
	ATOM	4807	CG	PRO	A	609	36.923	89.270	-29.305	1.00	16.57	A
15	ATOM	4808	C	PRO	A	609	38.648	91.279	-27.784	1.00	17.16	A
	ATOM	4809	O	PRO	A	609	38.322	92.003	-28.725	1.00	18.05	A
	ATOM	4810	N	GLN	A	610	39.789	91.408	-27.118	1.00	17.75	A
	ATOM	4811	CA	GLN	A	610	40.785	92.408	-27.464	1.00	19.28	A
	ATOM	4812	CB	GLN	A	610	41.057	93.346	-26.285	1.00	22.02	A
20	ATOM	4813	CG	GLN	A	610	39.869	94.195	-25.867	1.00	26.25	A
	ATOM	4814	CD	GLN	A	610	40.254	95.277	-24.875	1.00	28.59	A
	ATOM	4815	OE1	GLN	A	610	40.799	94.992	-23.808	1.00	30.20	A
	ATOM	4816	NE2	GLN	A	610	39.973	96.527	-25.225	1.00	30.13	A
	ATOM	4817	C	GLN	A	610	42.048	91.633	-27.802	1.00	18.53	A
25	ATOM	4818	O	GLN	A	610	42.391	90.671	-27.116	1.00	17.85	A
	ATOM	4819	N	GLY	A	611	42.732	92.043	-28.863	1.00	18.19	A
	ATOM	4820	CA	GLY	A	611	43.945	91.355	-29.257	1.00	18.07	A
	ATOM	4821	C	GLY	A	611	45.190	92.105	-28.840	1.00	18.33	A
	ATOM	4822	O	GLY	A	611	45.206	93.335	-28.816	1.00	18.55	A
30	ATOM	4823	N	SER	A	612	46.236	91.362	-28.498	1.00	18.22	A
	ATOM	4824	CA	SER	A	612	47.497	91.969	-28.091	1.00	18.50	A
	ATOM	4825	CB	SER	A	612	48.366	90.941	-27.365	1.00	17.71	A
	ATOM	4826	OG	SER	A	612	49.646	91.474	-27.077	1.00	17.75	A
	ATOM	4827	C	SER	A	612	48.247	92.494	-29.308	1.00	18.79	A
35	ATOM	4828	O	SER	A	612	48.194	91.904	-30.385	1.00	18.12	A
	ATOM	4829	N	THR	A	613	48.951	93.608	-29.134	1.00	20.66	A
	ATOM	4830	CA	THR	A	613	49.713	94.193	-30.229	1.00	22.22	A
	ATOM	4831	CB	THR	A	613	49.428	95.704	-30.370	1.00	23.24	A
	ATOM	4832	OG1	THR	A	613	49.860	96.385	-29.187	1.00	23.40	A
40	ATOM	4833	CG2	THR	A	613	47.939	95.952	-30.571	1.00	22.92	A
	ATOM	4834	C	THR	A	613	51.212	94.001	-30.007	1.00	22.80	A
	ATOM	4835	O	THR	A	613	52.030	94.545	-30.749	1.00	23.76	A
	ATOM	4836	N	THR	A	614	51.568	93.216	-28.992	1.00	22.98	A
	ATOM	4837	CA	THR	A	614	52.974	92.972	-28.672	1.00	23.21	A
45	ATOM	4838	CB	THR	A	614	53.417	93.818	-27.469	1.00	23.94	A
	ATOM	4839	OG1	THR	A	614	52.563	93.541	-26.352	1.00	24.76	A
	ATOM	4840	CG2	THR	A	614	53.353	95.302	-27.803	1.00	25.13	A
	ATOM	4841	C	THR	A	614	53.288	91.514	-28.349	1.00	22.57	A
	ATOM	4842	O	THR	A	614	54.453	91.130	-28.253	1.00	22.85	A
50	ATOM	4843	N	LYS	A	615	52.247	90.709	-28.176	1.00	21.12	A
	ATOM	4844	CA	LYS	A	615	52.404	89.297	-27.849	1.00	20.03	A
	ATOM	4845	CB	LYS	A	615	51.862	89.040	-26.439	1.00	22.00	A
	ATOM	4846	CG	LYS	A	615	51.894	87.593	-25.987	1.00	24.67	A
	ATOM	4847	CD	LYS	A	615	51.077	87.399	-24.711	1.00	25.80	A
55	ATOM	4848	CE	LYS	A	615	51.569	88.291	-23.581	1.00	25.99	A
	ATOM	4849	NZ	LYS	A	615	50.774	88.097	-22.330	1.00	26.04	A
	ATOM	4850	C	LYS	A	615	51.629	88.463	-28.863	1.00	18.41	A
	ATOM	4851	O	LYS	A	615	50.534	88.846	-29.270	1.00	17.64	A
	ATOM	4852	N	TYR	A	616	52.194	87.328	-29.271	1.00	16.73	A

5	ATOM	4853	CA	TYR	A	616	51.533	86.452	-30.236	1.00	15.58	A
	ATOM	4854	CB	TYR	A	616	52.100	86.679	-31.641	1.00	15.83	A
	ATOM	4855	CG	TYR	A	616	52.139	88.135	-32.028	1.00	18.36	A
	ATOM	4856	CD1	TYR	A	616	53.209	88.945	-31.651	1.00	18.36	A
	ATOM	4857	CE1	TYR	A	616	53.216	90.304	-31.937	1.00	20.30	A
10	ATOM	4858	CD2	TYR	A	616	51.074	88.722	-32.709	1.00	18.83	A
	ATOM	4859	CE2	TYR	A	616	51.069	90.080	-33.000	1.00	20.65	A
	ATOM	4860	CZ	TYR	A	616	52.142	90.864	-32.610	1.00	20.53	A
	ATOM	4861	OH	TYR	A	616	52.141	92.210	-32.890	1.00	23.34	A
	ATOM	4862	C	TYR	A	616	51.707	84.992	-29.847	1.00	14.72	A
15	ATOM	4863	O	TYR	A	616	52.623	84.652	-29.102	1.00	13.98	A
	ATOM	4864	N	ARG	A	617	50.821	84.134	-30.347	1.00	13.93	A
	ATOM	4865	CA	ARG	A	617	50.896	82.705	-30.049	1.00	13.86	A
	ATOM	4866	CB	ARG	A	617	49.503	82.116	-29.800	1.00	15.40	A
	ATOM	4867	CG	ARG	A	617	48.803	82.533	-28.527	1.00	16.68	A
20	ATOM	4868	CD	ARG	A	617	47.417	81.885	-28.463	1.00	17.77	A
	ATOM	4869	NE	ARG	A	617	47.486	80.424	-28.441	1.00	17.57	A
	ATOM	4870	CZ	ARG	A	617	46.805	79.622	-29.258	1.00	17.88	A
	ATOM	4871	NH1	ARG	A	617	45.993	80.130	-30.176	1.00	17.64	A
	ATOM	4872	NH2	ARG	A	617	46.941	78.307	-29.165	1.00	17.23	A
25	ATOM	4873	C	ARG	A	617	51.497	81.932	-31.210	1.00	13.44	A
	ATOM	4874	O	ARG	A	617	51.022	82.049	-32.337	1.00	14.13	A
	ATOM	4875	N	ILE	A	618	52.544	81.154	-30.953	1.00	11.96	A
	ATOM	4876	CA	ILE	A	618	53.097	80.331	-32.016	1.00	11.92	A
	ATOM	4877	CB	ILE	A	618	54.629	80.488	-32.179	1.00	11.58	A
30	ATOM	4878	CG2	ILE	A	618	55.359	80.077	-30.910	1.00	12.31	A
	ATOM	4879	CG1	ILE	A	618	55.083	79.644	-33.375	1.00	12.90	A
	ATOM	4880	CD1	ILE	A	618	56.396	80.078	-33.976	1.00	13.57	A
	ATOM	4881	C	ILE	A	618	52.721	78.900	-31.651	1.00	11.14	A
	ATOM	4882	O	ILE	A	618	52.845	78.490	-30.495	1.00	11.79	A
35	ATOM	4883	N	ILE	A	619	52.238	78.162	-32.643	1.00	11.17	A
	ATOM	4884	CA	ILE	A	619	51.767	76.791	-32.466	1.00	11.40	A
	ATOM	4885	CB	ILE	A	619	50.259	76.713	-32.779	1.00	12.11	A
	ATOM	4886	CG2	ILE	A	619	49.728	75.327	-32.455	1.00	14.03	A
	ATOM	4887	CG1	ILE	A	619	49.507	77.804	-32.017	1.00	13.46	A
40	ATOM	4888	CD1	ILE	A	619	48.191	78.193	-32.670	1.00	13.83	A
	ATOM	4889	C	ILE	A	619	52.468	75.823	-33.409	1.00	11.42	A
	ATOM	4890	O	ILE	A	619	52.636	76.113	-34.594	1.00	11.66	A
	ATOM	4891	N	PHE	A	620	52.864	74.665	-32.895	1.00	10.46	A
	ATOM	4892	CA	PHE	A	620	53.509	73.672	-33.742	1.00	9.92	A
45	ATOM	4893	CB	PHE	A	620	54.987	74.019	-33.964	1.00	9.89	A
	ATOM	4894	CG	PHE	A	620	55.842	73.914	-32.734	1.00	8.70	A
	ATOM	4895	CD1	PHE	A	620	56.487	72.719	-32.415	1.00	10.02	A
	ATOM	4896	CD2	PHE	A	620	56.025	75.017	-31.906	1.00	9.02	A
	ATOM	4897	CE1	PHE	A	620	57.309	72.627	-31.289	1.00	9.45	A
50	ATOM	4898	CE2	PHE	A	620	56.843	74.934	-30.778	1.00	10.10	A
	ATOM	4899	CZ	PHE	A	620	57.486	73.737	-30.471	1.00	10.05	A
	ATOM	4900	C	PHE	A	620	53.362	72.290	-33.133	1.00	10.23	A
	ATOM	4901	O	PHE	A	620	53.096	72.152	-31.938	1.00	10.39	A
	ATOM	4902	N	LYS	A	621	53.519	71.268	-33.963	1.00	10.49	A
55	ATOM	4903	CA	LYS	A	621	53.382	69.900	-33.498	1.00	11.17	A
	ATOM	4904	CB	LYS	A	621	52.896	69.007	-34.649	1.00	12.49	A
	ATOM	4905	CG	LYS	A	621	52.656	67.559	-34.247	1.00	14.18	A
	ATOM	4906	CD	LYS	A	621	51.816	66.822	-35.284	1.00	16.44	A
	ATOM	4907	CE	LYS	A	621	52.483	66.793	-36.648	1.00	17.70	A

5	ATOM	4908	NZ	LYS	A	621	51.667	66.023	-37.636	1.00	19.59	A
	ATOM	4909	C	LYS	A	621	54.685	69.362	-32.926	1.00	10.69	A
	ATOM	4910	O	LYS	A	621	55.711	69.322	-33.605	1.00	11.83	A
	ATOM	4911	N	ALA	A	622	54.648	68.972	-31.656	1.00	10.33	A
	ATOM	4912	CA	ALA	A	622	55.825	68.413	-31.008	1.00	9.91	A
10	ATOM	4913	CB	ALA	A	622	55.932	68.924	-29.568	1.00	9.70	A
	ATOM	4914	C	ALA	A	622	55.684	66.896	-31.012	1.00	10.39	A
	ATOM	4915	O	ALA	A	622	54.596	66.371	-30.780	1.00	11.60	A
	ATOM	4916	N	ARG	A	623	56.777	66.201	-31.308	1.00	10.44	A
	ATOM	4917	CA	ARG	A	623	56.792	64.741	-31.313	1.00	11.01	A
15	ATOM	4918	CB	ARG	A	623	57.229	64.207	-32.680	1.00	12.30	A
	ATOM	4919	CG	ARG	A	623	57.263	62.690	-32.746	1.00	14.39	A
	ATOM	4920	CD	ARG	A	623	57.233	62.180	-34.181	1.00	16.76	A
	ATOM	4921	NE	ARG	A	623	57.497	60.744	-34.244	1.00	18.23	A
	ATOM	4922	CZ	ARG	A	623	58.706	60.204	-34.134	1.00	19.11	A
20	ATOM	4923	NH1	ARG	A	623	59.771	60.976	-33.964	1.00	20.24	A
	ATOM	4924	NH2	ARG	A	623	58.851	58.889	-34.182	1.00	20.27	A
	ATOM	4925	C	ARG	A	623	57.795	64.364	-30.232	1.00	10.32	A
	ATOM	4926	O	ARG	A	623	58.981	64.682	-30.334	1.00	10.86	A
	ATOM	4927	N	VAL	A	624	57.306	63.687	-29.197	1.00	9.90	A
25	ATOM	4928	CA	VAL	A	624	58.121	63.333	-28.040	1.00	9.26	A
	ATOM	4929	CB	VAL	A	624	57.547	64.045	-26.794	1.00	8.57	A
	ATOM	4930	CG1	VAL	A	624	58.547	64.015	-25.651	1.00	8.67	A
	ATOM	4931	CG2	VAL	A	624	57.158	65.476	-27.160	1.00	9.69	A
	ATOM	4932	C	VAL	A	624	58.191	61.831	-27.770	1.00	9.00	A
30	ATOM	4933	O	VAL	A	624	57.189	61.130	-27.868	1.00	9.09	A
	ATOM	4934	N	PRO	A	625	59.381	61.325	-27.401	1.00	9.44	A
	ATOM	4935	CD	PRO	A	625	60.665	62.037	-27.290	1.00	10.05	A
	ATOM	4936	CA	PRO	A	625	59.555	59.895	-27.121	1.00	9.16	A
	ATOM	4937	CB	PRO	A	625	61.054	59.765	-26.851	1.00	10.20	A
35	ATOM	4938	CG	PRO	A	625	61.654	60.942	-27.563	1.00	10.52	A
	ATOM	4939	C	PRO	A	625	58.754	59.432	-25.911	1.00	9.12	A
	ATOM	4940	O	PRO	A	625	58.307	60.249	-25.100	1.00	8.82	A
	ATOM	4941	N	PRO	A	626	58.571	58.111	-25.769	1.00	9.36	A
	ATOM	4942	CD	PRO	A	626	59.055	57.027	-26.644	1.00	9.11	A
40	ATOM	4943	CA	PRO	A	626	57.824	57.575	-24.628	1.00	8.73	A
	ATOM	4944	CB	PRO	A	626	57.916	56.063	-24.830	1.00	8.19	A
	ATOM	4945	CG	PRO	A	626	58.096	55.913	-26.329	1.00	9.53	A
	ATOM	4946	C	PRO	A	626	58.566	58.008	-23.364	1.00	8.14	A
	ATOM	4947	O	PRO	A	626	59.786	57.847	-23.286	1.00	9.15	A
45	ATOM	4948	N	MSE	A	627	57.847	58.564	-22.390	1.00	7.51	A
	ATOM	4949	CA	MSE	A	627	58.460	59.002	-21.130	1.00	8.21	A
	ATOM	4950	CB	MSE	A	627	58.747	57.783	-20.250	1.00	10.53	A
	ATOM	4951	CG	MSE	A	627	57.500	56.983	-19.914	1.00	10.63	A
	ATOM	4952	SE	MSE	A	627	57.871	55.262	-19.133	1.00	20.00	A
50	ATOM	4953	CE	MSE	A	627	58.495	55.837	-17.415	1.00	15.15	A
	ATOM	4954	C	MSE	A	627	59.755	59.755	-21.414	1.00	8.18	A
	ATOM	4955	O	MSE	A	627	60.759	59.584	-20.712	1.00	7.85	A
	ATOM	4956	N	GLY	A	628	59.718	60.602	-22.442	1.00	8.18	A
	ATOM	4957	CA	GLY	A	628	60.908	61.329	-22.841	1.00	8.72	A
55	ATOM	4958	C	GLY	A	628	60.819	62.826	-23.028	1.00	8.56	A
	ATOM	4959	O	GLY	A	628	59.847	63.470	-22.627	1.00	7.33	A
	ATOM	4960	N	LEU	A	629	61.853	63.366	-23.663	1.00	7.72	A
	ATOM	4961	CA	LEU	A	629	61.972	64.797	-23.912	1.00	8.61	A
	ATOM	4962	CB	LEU	A	629	63.027	65.391	-22.979	1.00	8.59	A

5	ATOM	4963	CG	LEU	A	629	62.778	65.233	-21.480	1.00	9.21	A
	ATOM	4964	CD1	LEU	A	629	64.046	65.560	-20.708	1.00	9.45	A
	ATOM	4965	CD2	LEU	A	629	61.632	66.140	-21.064	1.00	9.65	A
	ATOM	4966	C	LEU	A	629	62.382	65.079	-25.347	1.00	8.71	A
	ATOM	4967	O	LEU	A	629	63.088	64.284	-25.966	1.00	9.28	A
	ATOM	4968	N	ALA	A	630	61.931	66.212	-25.871	1.00	8.74	A
	ATOM	4969	CA	ALA	A	630	62.276	66.625	-27.229	1.00	9.15	A
	ATOM	4970	CB	ALA	A	630	61.157	66.286	-28.197	1.00	9.76	A
	ATOM	4971	C	ALA	A	630	62.514	68.126	-27.201	1.00	9.28	A
	ATOM	4972	O	ALA	A	630	61.702	68.884	-26.663	1.00	8.90	A
10	ATOM	4973	N	THR	A	631	63.632	68.548	-27.784	1.00	9.16	A
	ATOM	4974	CA	THR	A	631	64.020	69.955	-27.810	1.00	9.71	A
	ATOM	4975	CB	THR	A	631	65.524	70.096	-27.498	1.00	10.27	A
	ATOM	4976	OG1	THR	A	631	65.823	69.394	-26.284	1.00	10.07	A
15	ATOM	4977	CG2	THR	A	631	65.914	71.559	-27.344	1.00	10.84	A
	ATOM	4978	C	THR	A	631	63.754	70.623	-29.155	1.00	9.81	A
	ATOM	4979	O	THR	A	631	64.015	70.038	-30.205	1.00	10.56	A
	ATOM	4980	N	TYR	A	632	63.226	71.844	-29.108	1.00	9.56	A
20	ATOM	4981	CA	TYR	A	632	62.958	72.628	-30.310	1.00	9.78	A
	ATOM	4982	CB	TYR	A	632	61.457	72.724	-30.597	1.00	10.51	A
	ATOM	4983	CG	TYR	A	632	60.827	71.415	-31.011	1.00	10.25	A
	ATOM	4984	CD1	TYR	A	632	60.461	70.466	-30.058	1.00	9.79	A
25	ATOM	4985	CE1	TYR	A	632	59.891	69.256	-30.432	1.00	11.56	A
	ATOM	4986	CD2	TYR	A	632	60.608	71.116	-32.356	1.00	9.93	A
	ATOM	4987	CE2	TYR	A	632	60.042	69.906	-32.743	1.00	11.41	A
	ATOM	4988	CZ	TYR	A	632	59.686	68.981	-31.774	1.00	10.98	A
30	ATOM	4989	OH	TYR	A	632	59.133	67.779	-32.152	1.00	12.83	A
	ATOM	4990	C	TYR	A	632	63.528	74.027	-30.123	1.00	9.80	A
	ATOM	4991	O	TYR	A	632	63.821	74.449	-29.001	1.00	9.66	A
	ATOM	4992	N	VAL	A	633	63.680	74.749	-31.227	1.00	9.77	A
35	ATOM	4993	CA	VAL	A	633	64.226	76.096	-31.188	1.00	10.76	A
	ATOM	4994	CB	VAL	A	633	65.618	76.152	-31.867	1.00	11.04	A
	ATOM	4995	CG1	VAL	A	633	66.193	77.557	-31.768	1.00	13.11	A
	ATOM	4996	CG2	VAL	A	633	66.556	75.144	-31.225	1.00	12.71	A
40	ATOM	4997	C	VAL	A	633	63.304	77.076	-31.906	1.00	10.49	A
	ATOM	4998	O	VAL	A	633	62.811	76.786	-32.995	1.00	10.92	A
	ATOM	4999	N	LEU	A	634	63.060	78.220	-31.277	1.00	11.11	A
	ATOM	5000	CA	LEU	A	634	62.227	79.265	-31.866	1.00	12.07	A
45	ATOM	5001	CB	LEU	A	634	61.213	79.800	-30.853	1.00	12.58	A
	ATOM	5002	CG	LEU	A	634	60.244	78.792	-30.237	1.00	15.79	A
	ATOM	5003	CD1	LEU	A	634	59.242	79.541	-29.371	1.00	15.32	A
	ATOM	5004	CD2	LEU	A	634	59.527	78.022	-31.322	1.00	17.18	A
50	ATOM	5005	C	LEU	A	634	63.181	80.379	-32.269	1.00	12.31	A
	ATOM	5006	O	LEU	A	634	63.947	80.872	-31.443	1.00	12.05	A
	ATOM	5007	N	THR	A	635	63.135	80.768	-33.540	1.00	12.28	A
	ATOM	5008	CA	THR	A	635	64.018	81.804	-34.059	1.00	13.14	A
55	ATOM	5009	CB	THR	A	635	64.983	81.207	-35.099	1.00	12.77	A
	ATOM	5010	OG1	THR	A	635	65.667	80.086	-34.522	1.00	13.31	A
	ATOM	5011	CG2	THR	A	635	66.004	82.244	-35.542	1.00	12.18	A
	ATOM	5012	C	THR	A	635	63.238	82.943	-34.706	1.00	13.84	A
55	ATOM	5013	O	THR	A	635	62.285	82.718	-35.449	1.00	13.21	A
	ATOM	5014	N	ILE	A	636	63.655	84.171	-34.424	1.00	15.47	A
	ATOM	5015	CA	ILE	A	636	62.982	85.334	-34.985	1.00	16.90	A
	ATOM	5016	CB	ILE	A	636	63.064	86.544	-34.022	1.00	17.25	A
	ATOM	5017	CG2	ILE	A	636	64.492	87.069	-33.958	1.00	17.16	A

5	ATOM	5018	CG1	ILE	A	636	62.120	87.653	-34.495	1.00	16.98	A
	ATOM	5019	CD1	ILE	A	636	62.027	88.831	-33.538	1.00	17.62	A
	ATOM	5020	C	ILE	A	636	63.610	85.712	-36.321	1.00	18.42	A
	ATOM	5021	O	ILE	A	636	64.781	85.430	-36.570	1.00	17.70	A
	ATOM	5022	N	SER	A	637	62.811	86.330	-37.184	1.00	20.09	A
10	ATOM	5023	CA	SER	A	637	63.275	86.780	-38.492	1.00	22.79	A
	ATOM	5024	CB	SER	A	637	62.850	85.797	-39.587	1.00	23.81	A
	ATOM	5025	OG	SER	A	637	61.442	85.665	-39.645	1.00	26.10	A
	ATOM	5026	C	SER	A	637	62.651	88.149	-38.739	1.00	24.15	A
	ATOM	5027	O	SER	A	637	61.724	88.545	-38.035	1.00	23.27	A
15	ATOM	5028	N	ASP	A	638	63.160	88.874	-39.730	1.00	26.58	A
	ATOM	5029	CA	ASP	A	638	62.641	90.203	-40.034	1.00	28.99	A
	ATOM	5030	CB	ASP	A	638	63.643	90.978	-40.897	1.00	31.15	A
	ATOM	5031	CG	ASP	A	638	63.893	90.317	-42.240	1.00	33.16	A
	ATOM	5032	OD1	ASP	A	638	62.934	90.185	-43.030	1.00	34.91	A
20	ATOM	5033	OD2	ASP	A	638	65.050	89.930	-42.507	1.00	34.82	A
	ATOM	5034	C	ASP	A	638	61.289	90.154	-40.737	1.00	29.32	A
	ATOM	5035	O	ASP	A	638	60.477	91.070	-40.599	1.00	30.07	A
	ATOM	5036	N	SER	A	639	61.046	89.080	-41.482	1.00	28.95	A
	ATOM	5037	CA	SER	A	639	59.793	88.930	-42.210	1.00	28.76	A
25	ATOM	5038	CB	SER	A	639	60.020	89.203	-43.699	1.00	28.80	A
	ATOM	5039	OG	SER	A	639	60.995	88.324	-44.232	1.00	29.52	A
	ATOM	5040	C	SER	A	639	59.192	87.542	-42.029	1.00	28.41	A
	ATOM	5041	O	SER	A	639	59.794	86.670	-41.403	1.00	27.60	A
	ATOM	5042	N	LYS	A	640	58.002	87.343	-42.586	1.00	27.73	A
30	ATOM	5043	CA	LYS	A	640	57.315	86.063	-42.481	1.00	27.72	A
	ATOM	5044	CB	LYS	A	640	56.025	86.081	-43.305	1.00	29.03	A
	ATOM	5045	CG	LYS	A	640	55.001	87.094	-42.820	1.00	31.44	A
	ATOM	5046	CD	LYS	A	640	53.668	86.941	-43.539	1.00	32.89	A
	ATOM	5047	CE	LYS	A	640	53.799	87.189	-45.032	1.00	33.76	A
35	ATOM	5048	NZ	LYS	A	640	52.485	87.054	-45.718	1.00	34.46	A
	ATOM	5049	C	LYS	A	640	58.186	84.897	-42.928	1.00	26.49	A
	ATOM	5050	O	LYS	A	640	58.627	84.839	-44.076	1.00	26.60	A
	ATOM	5051	N	PRO	A	641	58.453	83.950	-42.014	1.00	25.24	A
	ATOM	5052	CD	PRO	A	641	58.068	83.956	-40.592	1.00	25.03	A
40	ATOM	5053	CA	PRO	A	641	59.275	82.780	-42.327	1.00	24.06	A
	ATOM	5054	CB	PRO	A	641	59.570	82.191	-40.951	1.00	24.74	A
	ATOM	5055	CG	PRO	A	641	58.346	82.531	-40.181	1.00	25.06	A
	ATOM	5056	C	PRO	A	641	58.544	81.804	-43.246	1.00	23.11	A
	ATOM	5057	O	PRO	A	641	57.314	81.732	-43.250	1.00	22.10	A
45	ATOM	5058	N	GLU	A	642	59.316	81.052	-44.019	1.00	22.60	A
	ATOM	5059	CA	GLU	A	642	58.772	80.090	-44.969	1.00	22.59	A
	ATOM	5060	CB	GLU	A	642	59.920	79.413	-45.725	1.00	24.75	A
	ATOM	5061	CG	GLU	A	642	59.482	78.292	-46.655	1.00	27.41	A
	ATOM	5062	CD	GLU	A	642	60.650	77.630	-47.364	1.00	29.34	A
50	ATOM	5063	OE1	GLU	A	642	60.415	76.662	-48.118	1.00	30.70	A
	ATOM	5064	OE2	GLU	A	642	61.801	78.077	-47.167	1.00	30.38	A
	ATOM	5065	C	GLU	A	642	57.863	79.011	-44.387	1.00	21.56	A
	ATOM	5066	O	GLU	A	642	56.864	78.641	-45.001	1.00	22.04	A
	ATOM	5067	N	HIS	A	643	58.202	78.511	-43.204	1.00	20.18	A
55	ATOM	5068	CA	HIS	A	643	57.427	77.434	-42.597	1.00	18.61	A
	ATOM	5069	CB	HIS	A	643	58.391	76.385	-42.044	1.00	19.22	A
	ATOM	5070	CG	HIS	A	643	59.281	75.789	-43.088	1.00	19.81	A
	ATOM	5071	CD2	HIS	A	643	60.558	76.071	-43.437	1.00	19.90	A
	ATOM	5072	ND1	HIS	A	643	58.851	74.816	-43.963	1.00	20.57	A

5	ATOM	5073	CE1	HIS	A	643	59.825	74.523	-44.806	1.00	20.30	A
	ATOM	5074	NE2	HIS	A	643	60.871	75.272	-44.509	1.00	19.73	A
	ATOM	5075	C	HIS	A	643	56.421	77.828	-41.527	1.00	17.54	A
	ATOM	5076	O	HIS	A	643	55.958	76.978	-40.764	1.00	16.42	A
	ATOM	5077	N	THR	A	644	56.079	79.110	-41.474	1.00	15.71	A
	ATOM	5078	CA	THR	A	644	55.110	79.598	-40.503	1.00	15.08	A
	ATOM	5079	CB	THR	A	644	55.752	80.606	-39.524	1.00	14.66	A
	ATOM	5080	OG1	THR	A	644	56.816	79.964	-38.808	1.00	14.87	A
10	ATOM	5081	CG2	THR	A	644	54.719	81.122	-38.524	1.00	14.03	A
	ATOM	5082	C	THR	A	644	53.957	80.279	-41.236	1.00	15.17	A
	ATOM	5083	O	THR	A	644	54.177	81.138	-42.092	1.00	15.67	A
	ATOM	5084	N	SER	A	645	52.733	79.874	-40.909	1.00	14.18	A
15	ATOM	5085	CA	SER	A	645	51.535	80.448	-41.514	1.00	13.57	A
	ATOM	5086	CB	SER	A	645	50.586	79.347	-41.989	1.00	14.13	A
	ATOM	5087	OG	SER	A	645	50.085	78.600	-40.892	1.00	14.02	A
	ATOM	5088	C	SER	A	645	50.836	81.303	-40.467	1.00	13.45	A
	ATOM	5089	O	SER	A	645	51.140	81.213	-39.276	1.00	13.19	A
20	ATOM	5090	N	TYR	A	646	49.896	82.129	-40.910	1.00	13.22	A
	ATOM	5091	CA	TYR	A	646	49.167	83.006	-40.003	1.00	13.22	A
	ATOM	5092	CB	TYR	A	646	49.536	84.464	-40.279	1.00	14.27	A
	ATOM	5093	CG	TYR	A	646	51.011	84.707	-40.096	1.00	14.12	A
	ATOM	5094	CD1	TYR	A	646	51.917	84.400	-41.110	1.00	14.67	A
25	ATOM	5095	CE1	TYR	A	646	53.287	84.520	-40.910	1.00	15.68	A
	ATOM	5096	CD2	TYR	A	646	51.513	85.150	-38.875	1.00	14.12	A
	ATOM	5097	CE2	TYR	A	646	52.882	85.274	-38.664	1.00	14.90	A
	ATOM	5098	CZ	TYR	A	646	53.762	84.954	-39.685	1.00	14.72	A
	ATOM	5099	OH	TYR	A	646	55.119	85.045	-39.472	1.00	16.28	A
30	ATOM	5100	C	TYR	A	646	47.665	82.815	-40.107	1.00	13.24	A
	ATOM	5101	O	TYR	A	646	47.098	82.807	-41.198	1.00	14.84	A
	ATOM	5102	N	ALA	A	647	47.025	82.670	-38.954	1.00	12.63	A
	ATOM	5103	CA	ALA	A	647	45.590	82.463	-38.900	1.00	12.30	A
	ATOM	5104	CB	ALA	A	647	45.187	82.017	-37.497	1.00	12.86	A
35	ATOM	5105	C	ALA	A	647	44.795	83.697	-39.288	1.00	12.48	A
	ATOM	5106	O	ALA	A	647	45.230	84.832	-39.085	1.00	12.90	A
	ATOM	5107	N	SER	A	648	43.624	83.464	-39.862	1.00	12.72	A
	ATOM	5108	CA	SER	A	648	42.742	84.556	-40.223	1.00	12.98	A
	ATOM	5109	CB	SER	A	648	41.901	84.192	-41.448	1.00	14.58	A
40	ATOM	5110	OG	SER	A	648	41.117	83.036	-41.214	1.00	17.12	A
	ATOM	5111	C	SER	A	648	41.851	84.716	-38.998	1.00	12.22	A
	ATOM	5112	O	SER	A	648	41.676	83.770	-38.222	1.00	12.30	A
	ATOM	5113	N	ASN	A	649	41.300	85.906	-38.812	1.00	11.83	A
	ATOM	5114	CA	ASN	A	649	40.434	86.163	-37.672	1.00	11.16	A
45	ATOM	5115	CB	ASN	A	649	41.183	86.971	-36.609	1.00	11.94	A
	ATOM	5116	CG	ASN	A	649	42.355	86.208	-36.017	1.00	12.08	A
	ATOM	5117	OD1	ASN	A	649	42.188	85.394	-35.105	1.00	11.76	A
	ATOM	5118	ND2	ASN	A	649	43.547	86.456	-36.544	1.00	12.65	A
	ATOM	5119	C	ASN	A	649	39.200	86.917	-38.132	1.00	12.07	A
50	ATOM	5120	O	ASN	A	649	39.300	87.899	-38.870	1.00	12.58	A
	ATOM	5121	N	LEU	A	650	38.041	86.445	-37.692	1.00	11.67	A
	ATOM	5122	CA	LEU	A	650	36.763	87.046	-38.053	1.00	11.94	A
	ATOM	5123	CB	LEU	A	650	35.995	86.099	-38.976	1.00	11.82	A
	ATOM	5124	CG	LEU	A	650	34.550	86.449	-39.334	1.00	11.91	A
55	ATOM	5125	CD1	LEU	A	650	34.509	87.731	-40.159	1.00	12.74	A
	ATOM	5126	CD2	LEU	A	650	33.941	85.294	-40.117	1.00	13.05	A
	ATOM	5127	C	LEU	A	650	35.947	87.314	-36.796	1.00	12.84	A

5	ATOM	5128	O	LEU	A	650	35.635	86.390	-36.040	1.00	12.29	A
	ATOM	5129	N	LEU	A	651	35.609	88.579	-36.574	1.00	13.28	A
	ATOM	5130	CA	LEU	A	651	34.828	88.972	-35.410	1.00	13.95	A
	ATOM	5131	CB	LEU	A	651	35.427	90.233	-34.775	1.00	15.51	A
	ATOM	5132	CG	LEU	A	651	34.996	90.608	-33.352	1.00	17.09	A
10	ATOM	5133	CD1	LEU	A	651	33.573	91.118	-33.352	1.00	18.83	A
	ATOM	5134	CD2	LEU	A	651	35.144	89.403	-32.434	1.00	17.37	A
	ATOM	5135	C	LEU	A	651	33.396	89.227	-35.860	1.00	14.48	A
	ATOM	5136	O	LEU	A	651	33.128	90.156	-36.624	1.00	15.41	A
	ATOM	5137	N	LEU	A	652	32.481	88.391	-35.383	1.00	14.89	A
15	ATOM	5138	CA	LEU	A	652	31.079	88.497	-35.747	1.00	15.05	A
	ATOM	5139	CB	LEU	A	652	30.513	87.104	-36.041	1.00	14.75	A
	ATOM	5140	CG	LEU	A	652	31.240	86.327	-37.142	1.00	14.59	A
	ATOM	5141	CD1	LEU	A	652	30.672	84.919	-37.249	1.00	14.90	A
	ATOM	5142	CD2	LEU	A	652	31.101	87.068	-38.471	1.00	14.78	A
20	ATOM	5143	C	LEU	A	652	30.230	89.179	-34.684	1.00	16.72	A
	ATOM	5144	O	LEU	A	652	30.096	88.687	-33.560	1.00	15.79	A
	ATOM	5145	N	ARG	A	653	29.668	90.324	-35.050	1.00	18.41	A
	ATOM	5146	CA	ARG	A	653	28.800	91.083	-34.164	1.00	21.34	A
	ATOM	5147	CB	ARG	A	653	29.502	91.426	-32.848	1.00	22.76	A
25	ATOM	5148	CG	ARG	A	653	30.545	92.524	-32.929	1.00	25.26	A
	ATOM	5149	CD	ARG	A	653	30.599	93.251	-31.595	1.00	27.66	A
	ATOM	5150	NE	ARG	A	653	31.884	93.887	-31.338	1.00	29.57	A
	ATOM	5151	CZ	ARG	A	653	32.159	94.575	-30.235	1.00	30.35	A
	ATOM	5152	NH1	ARG	A	653	31.235	94.718	-29.295	1.00	30.94	A
30	ATOM	5153	NH2	ARG	A	653	33.361	95.108	-30.064	1.00	31.04	A
	ATOM	5154	C	ARG	A	653	28.365	92.369	-34.838	1.00	22.58	A
	ATOM	5155	O	ARG	A	653	28.976	92.810	-35.811	1.00	22.35	A
	ATOM	5156	N	LYS	A	654	27.300	92.961	-34.314	1.00	24.79	A
	ATOM	5157	CA	LYS	A	654	26.787	94.214	-34.841	1.00	26.87	A
35	ATOM	5158	CB	LYS	A	654	25.297	94.350	-34.518	1.00	28.87	A
	ATOM	5159	CG	LYS	A	654	24.403	93.357	-35.251	1.00	31.28	A
	ATOM	5160	CD	LYS	A	654	23.517	94.059	-36.275	1.00	33.37	A
	ATOM	5161	CE	LYS	A	654	24.341	94.806	-37.315	1.00	34.26	A
	ATOM	5162	NZ	LYS	A	654	23.486	95.582	-38.259	1.00	35.77	A
40	ATOM	5163	C	LYS	A	654	27.567	95.349	-34.186	1.00	27.13	A
	ATOM	5164	O	LYS	A	654	28.051	95.207	-33.063	1.00	27.36	A
	ATOM	5165	N	ASN	A	655	27.696	96.465	-34.893	1.00	27.40	A
	ATOM	5166	CA	ASN	A	655	28.411	97.626	-34.376	1.00	27.55	A
	ATOM	5167	CB	ASN	A	655	27.671	98.196	-33.165	1.00	29.06	A
45	ATOM	5168	CG	ASN	A	655	26.166	98.203	-33.353	1.00	30.72	A
	ATOM	5169	OD1	ASN	A	655	25.651	98.755	-34.327	1.00	31.94	A
	ATOM	5170	ND2	ASN	A	655	25.451	97.585	-32.419	1.00	31.37	A
	ATOM	5171	C	ASN	A	655	29.843	97.273	-33.978	1.00	26.37	A
	ATOM	5172	O	ASN	A	655	30.257	97.502	-32.841	1.00	26.45	A
50	ATOM	5173	N	PRO	A	656	30.621	96.708	-34.911	1.00	25.13	A
	ATOM	5174	CD	PRO	A	656	30.269	96.273	-36.276	1.00	24.78	A
	ATOM	5175	CA	PRO	A	656	32.003	96.346	-34.595	1.00	23.93	A
	ATOM	5176	CB	PRO	A	656	32.340	95.333	-35.678	1.00	23.98	A
	ATOM	5177	CG	PRO	A	656	31.621	95.907	-36.863	1.00	24.37	A
55	ATOM	5178	C	PRO	A	656	32.939	97.547	-34.637	1.00	23.11	A
	ATOM	5179	O	PRO	A	656	32.640	98.561	-35.267	1.00	22.26	A
	ATOM	5180	N	THR	A	657	34.067	97.422	-33.948	1.00	22.32	A
	ATOM	5181	CA	THR	A	657	35.079	98.466	-33.930	1.00	21.57	A
	ATOM	5182	CB	THR	A	657	35.217	99.113	-32.534	1.00	21.87	A

5	ATOM	5183	OG1	THR	A	657	35.326	98.092	-31.536	1.00	22.67	A
	ATOM	5184	CG2	THR	A	657	34.010	99.996	-32.237	1.00	21.99	A
	ATOM	5185	C	THR	A	657	36.392	97.807	-34.329	1.00	21.08	A
	ATOM	5186	O	THR	A	657	36.543	96.589	-34.210	1.00	20.93	A
	ATOM	5187	N	SER	A	658	37.335	98.609	-34.806	1.00	20.46	A
10	ATOM	5188	CA	SER	A	658	38.626	98.099	-35.249	1.00	20.63	A
	ATOM	5189	CB	SER	A	658	39.533	99.255	-35.660	1.00	20.97	A
	ATOM	5190	OG	SER	A	658	39.882	100.035	-34.531	1.00	21.67	A
	ATOM	5191	C	SER	A	658	39.337	97.257	-34.197	1.00	20.59	A
	ATOM	5192	O	SER	A	658	39.126	97.426	-32.997	1.00	20.25	A
15	ATOM	5193	N	LEU	A	659	40.186	96.350	-34.670	1.00	20.47	A
	ATOM	5194	CA	LEU	A	659	40.954	95.469	-33.800	1.00	21.02	A
	ATOM	5195	CB	LEU	A	659	40.294	94.088	-33.719	1.00	21.51	A
	ATOM	5196	CG	LEU	A	659	38.979	93.982	-32.941	1.00	21.80	A
	ATOM	5197	CD1	LEU	A	659	38.354	92.610	-33.155	1.00	22.38	A
20	ATOM	5198	CD2	LEU	A	659	39.243	94.224	-31.466	1.00	21.76	A
	ATOM	5199	C	LEU	A	659	42.372	95.328	-34.340	1.00	21.00	A
	ATOM	5200	O	LEU	A	659	42.695	94.351	-35.019	1.00	21.34	A
	ATOM	5201	N	PRO	A	660	43.235	96.318	-34.061	1.00	21.33	A
	ATOM	5202	CD	PRO	A	660	42.965	97.547	-33.295	1.00	21.66	A
25	ATOM	5203	CA	PRO	A	660	44.625	96.289	-34.526	1.00	21.08	A
	ATOM	5204	CB	PRO	A	660	45.129	97.687	-34.179	1.00	21.58	A
	ATOM	5205	CG	PRO	A	660	44.359	98.017	-32.941	1.00	22.16	A
	ATOM	5206	C	PRO	A	660	45.405	95.190	-33.812	1.00	20.87	A
	ATOM	5207	O	PRO	A	660	45.139	94.888	-32.649	1.00	20.82	A
30	ATOM	5208	N	LEU	A	661	46.365	94.595	-34.510	1.00	21.59	A
	ATOM	5209	CA	LEU	A	661	47.158	93.517	-33.931	1.00	22.22	A
	ATOM	5210	CB	LEU	A	661	46.761	92.187	-34.573	1.00	21.97	A
	ATOM	5211	CG	LEU	A	661	45.311	91.743	-34.360	1.00	22.01	A
	ATOM	5212	CD1	LEU	A	661	45.039	90.474	-35.154	1.00	21.83	A
35	ATOM	5213	CD2	LEU	A	661	45.061	91.514	-32.878	1.00	21.98	A
	ATOM	5214	C	LEU	A	661	48.661	93.731	-34.079	1.00	23.14	A
	ATOM	5215	O	LEU	A	661	49.430	92.771	-34.137	1.00	22.28	A
	ATOM	5216	N	GLY	A	662	49.076	94.991	-34.143	1.00	24.28	A
	ATOM	5217	CA	GLY	A	662	50.490	95.293	-34.276	1.00	25.42	A
40	ATOM	5218	C	GLY	A	662	51.141	94.711	-35.517	1.00	26.28	A
	ATOM	5219	O	GLY	A	662	50.702	94.961	-36.639	1.00	26.88	A
	ATOM	5220	N	GLN	A	663	52.189	93.919	-35.313	1.00	26.82	A
	ATOM	5221	CA	GLN	A	663	52.925	93.311	-36.416	1.00	27.25	A
	ATOM	5222	CB	GLN	A	663	54.290	92.827	-35.926	1.00	29.76	A
45	ATOM	5223	CG	GLN	A	663	55.126	93.886	-35.235	1.00	32.87	A
	ATOM	5224	CD	GLN	A	663	56.472	93.350	-34.796	1.00	34.37	A
	ATOM	5225	OE1	GLN	A	663	57.304	92.975	-35.624	1.00	34.97	A
	ATOM	5226	NE2	GLN	A	663	56.692	93.302	-33.486	1.00	35.06	A
	ATOM	5227	C	GLN	A	663	52.211	92.147	-37.097	1.00	25.74	A
50	ATOM	5228	O	GLN	A	663	52.647	91.685	-38.151	1.00	25.61	A
	ATOM	5229	N	TYR	A	664	51.122	91.669	-36.502	1.00	24.78	A
	ATOM	5230	CA	TYR	A	664	50.390	90.545	-37.077	1.00	23.54	A
	ATOM	5231	CB	TYR	A	664	49.099	90.298	-36.296	1.00	21.17	A
	ATOM	5232	CG	TYR	A	664	48.511	88.923	-36.523	1.00	18.46	A
55	ATOM	5233	CD1	TYR	A	664	49.099	87.790	-35.959	1.00	17.21	A
	ATOM	5234	CE1	TYR	A	664	48.558	86.520	-36.167	1.00	16.14	A
	ATOM	5235	CD2	TYR	A	664	47.369	88.754	-37.304	1.00	16.89	A
	ATOM	5236	CE2	TYR	A	664	46.824	87.493	-37.520	1.00	16.07	A
	ATOM	5237	CZ	TYR	A	664	47.421	86.381	-36.949	1.00	15.48	A

5	ATOM	5238	OH	TYR	A	664	46.871	85.138	-37.157	1.00	14.24	A
	ATOM	5239	C	TYR	A	664	50.077	90.788	-38.556	1.00	23.88	A
	ATOM	5240	O	TYR	A	664	49.453	91.787	-38.917	1.00	23.82	A
	ATOM	5241	N	PRO	A	665	50.511	89.865	-39.430	1.00	24.84	A
	ATOM	5242	CD	PRO	A	665	51.277	88.674	-39.021	1.00	24.79	A
	ATOM	5243	CA	PRO	A	665	50.341	89.881	-40.887	1.00	25.24	A
	ATOM	5244	CB	PRO	A	665	50.859	88.507	-41.304	1.00	25.87	A
	ATOM	5245	CG	PRO	A	665	51.930	88.253	-40.314	1.00	25.62	A
	ATOM	5246	C	PRO	A	665	48.947	90.152	-41.450	1.00	25.71	A
	ATOM	5247	O	PRO	A	665	48.771	91.071	-42.249	1.00	26.69	A
10	ATOM	5248	N	GLU	A	666	47.960	89.357	-41.048	1.00	25.11	A
	ATOM	5249	CA	GLU	A	666	46.609	89.525	-41.575	1.00	24.71	A
	ATOM	5250	CB	GLU	A	666	45.952	88.160	-41.804	1.00	26.60	A
	ATOM	5251	CG	GLU	A	666	44.712	88.238	-42.688	1.00	29.67	A
	ATOM	5252	CD	GLU	A	666	44.229	86.881	-43.159	1.00	30.79	A
15	ATOM	5253	OE1	GLU	A	666	45.049	86.112	-43.703	1.00	32.46	A
	ATOM	5254	OE2	GLU	A	666	43.026	86.588	-42.997	1.00	31.43	A
	ATOM	5255	C	GLU	A	666	45.689	90.392	-40.728	1.00	23.13	A
	ATOM	5256	O	GLU	A	666	45.671	90.298	-39.501	1.00	22.63	A
	ATOM	5257	N	ASP	A	667	44.916	91.235	-41.406	1.00	21.36	A
20	ATOM	5258	CA	ASP	A	667	43.984	92.133	-40.741	1.00	19.98	A
	ATOM	5259	CB	ASP	A	667	43.616	93.289	-41.674	1.00	22.14	A
	ATOM	5260	CG	ASP	A	667	44.833	94.017	-42.205	1.00	24.02	A
	ATOM	5261	OD1	ASP	A	667	45.630	94.522	-41.387	1.00	25.50	A
	ATOM	5262	OD2	ASP	A	667	44.993	94.085	-43.443	1.00	26.55	A
25	ATOM	5263	C	ASP	A	667	42.713	91.396	-40.332	1.00	17.30	A
	ATOM	5264	O	ASP	A	667	42.220	90.536	-41.060	1.00	16.65	A
	ATOM	5265	N	VAL	A	668	42.189	91.741	-39.163	1.00	16.72	A
	ATOM	5266	CA	VAL	A	668	40.967	91.124	-38.668	1.00	15.69	A
	ATOM	5267	CB	VAL	A	668	40.652	91.582	-37.226	1.00	15.77	A
30	ATOM	5268	CG1	VAL	A	668	39.311	91.011	-36.772	1.00	15.98	A
	ATOM	5269	CG2	VAL	A	668	41.761	91.127	-36.286	1.00	15.95	A
	ATOM	5270	C	VAL	A	668	39.803	91.506	-39.576	1.00	15.77	A
	ATOM	5271	O	VAL	A	668	39.730	92.637	-40.068	1.00	16.20	A
	ATOM	5272	N	LYS	A	669	38.903	90.554	-39.800	1.00	15.11	A
35	ATOM	5273	CA	LYS	A	669	37.729	90.772	-40.640	1.00	16.26	A
	ATOM	5274	CB	LYS	A	669	37.589	89.626	-41.643	1.00	18.36	A
	ATOM	5275	CG	LYS	A	669	38.834	89.429	-42.500	1.00	22.33	A
	ATOM	5276	CD	LYS	A	669	38.865	88.069	-43.178	1.00	25.02	A
	ATOM	5277	CE	LYS	A	669	40.204	87.847	-43.872	1.00	26.17	A
40	ATOM	5278	NZ	LYS	A	669	40.319	86.492	-44.474	1.00	27.07	A
	ATOM	5279	C	LYS	A	669	36.501	90.841	-39.738	1.00	15.79	A
	ATOM	5280	O	LYS	A	669	36.484	90.250	-38.656	1.00	15.00	A
	ATOM	5281	N	PHE	A	670	35.477	91.565	-40.177	1.00	15.18	A
	ATOM	5282	CA	PHE	A	670	34.263	91.707	-39.386	1.00	15.33	A
45	ATOM	5283	CB	PHE	A	670	34.122	93.150	-38.881	1.00	15.50	A
	ATOM	5284	CG	PHE	A	670	35.310	93.637	-38.100	1.00	15.57	A
	ATOM	5285	CD1	PHE	A	670	36.455	94.082	-38.755	1.00	16.30	A
	ATOM	5286	CD2	PHE	A	670	35.301	93.612	-36.707	1.00	16.26	A
	ATOM	5287	CE1	PHE	A	670	37.577	94.493	-38.034	1.00	15.93	A
50	ATOM	5288	CE2	PHE	A	670	36.417	94.020	-35.978	1.00	16.44	A
	ATOM	5289	CZ	PHE	A	670	37.558	94.462	-36.645	1.00	16.10	A
	ATOM	5290	C	PHE	A	670	33.019	91.312	-40.168	1.00	15.07	A
	ATOM	5291	O	PHE	A	670	33.052	91.192	-41.392	1.00	15.25	A
	ATOM	5292	N	GLY	A	671	31.921	91.101	-39.450	1.00	15.47	A
55	ATOM	5292	N	GLY	A	671	31.921	91.101	-39.450	1.00	15.47	A

5	ATOM	5293	CA	GLY	A	671	30.675	90.729	-40.097	1.00	15.10	A
	ATOM	5294	C	GLY	A	671	29.551	90.550	-39.097	1.00	15.27	A
	ATOM	5295	O	GLY	A	671	29.796	90.431	-37.897	1.00	14.16	A
	ATOM	5296	N	ASP	A	672	28.311	90.551	-39.575	1.00	15.65	A
	ATOM	5297	CA	ASP	A	672	27.181	90.359	-38.676	1.00	16.95	A
	ATOM	5298	CB	ASP	A	672	25.855	90.715	-39.358	1.00	18.42	A
	ATOM	5299	CG	ASP	A	672	25.741	92.188	-39.695	1.00	20.16	A
	ATOM	5300	OD1	ASP	A	672	26.285	93.021	-38.942	1.00	21.62	A
	ATOM	5301	OD2	ASP	A	672	25.085	92.510	-40.707	1.00	22.09	A
	ATOM	5302	C	ASP	A	672	27.137	88.892	-38.271	1.00	17.16	A
10	ATOM	5303	O	ASP	A	672	27.617	88.027	-39.002	1.00	16.41	A
	ATOM	5304	N	PRO	A	673	26.565	88.594	-37.094	1.00	17.20	A
	ATOM	5305	CD	PRO	A	673	25.975	89.505	-36.095	1.00	17.66	A
	ATOM	5306	CA	PRO	A	673	26.483	87.202	-36.647	1.00	17.71	A
15	ATOM	5307	CB	PRO	A	673	25.575	87.291	-35.428	1.00	17.79	A
	ATOM	5308	CG	PRO	A	673	25.920	88.630	-34.858	1.00	18.25	A
	ATOM	5309	C	PRO	A	673	25.883	86.332	-37.750	1.00	17.63	A
	ATOM	5310	O	PRO	A	673	24.986	86.766	-38.479	1.00	17.66	A
20	ATOM	5311	N	ARG	A	674	26.393	85.114	-37.881	1.00	17.42	A
	ATOM	5312	CA	ARG	A	674	25.901	84.183	-38.887	1.00	17.69	A
	ATOM	5313	CB	ARG	A	674	26.367	84.596	-40.289	1.00	18.49	A
	ATOM	5314	CG	ARG	A	674	27.866	84.469	-40.540	1.00	19.76	A
25	ATOM	5315	CD	ARG	A	674	28.155	84.525	-42.038	1.00	21.74	A
	ATOM	5316	NE	ARG	A	674	29.545	84.220	-42.371	1.00	23.11	A
	ATOM	5317	CZ	ARG	A	674	30.535	85.107	-42.374	1.00	23.99	A
	ATOM	5318	NH1	ARG	A	674	30.301	86.375	-42.059	1.00	24.74	A
30	ATOM	5319	NH2	ARG	A	674	31.763	84.727	-42.703	1.00	24.81	A
	ATOM	5320	C	ARG	A	674	26.422	82.792	-38.575	1.00	17.54	A
	ATOM	5321	O	ARG	A	674	27.386	82.639	-37.825	1.00	17.04	A
	ATOM	5322	N	GLU	A	675	25.780	81.779	-39.144	1.00	18.31	A
35	ATOM	5323	CA	GLU	A	675	26.218	80.413	-38.919	1.00	19.05	A
	ATOM	5324	CB	GLU	A	675	25.157	79.420	-39.396	1.00	21.17	A
	ATOM	5325	CG	GLU	A	675	23.805	79.621	-38.744	1.00	23.24	A
	ATOM	5326	CD	GLU	A	675	22.959	78.368	-38.757	1.00	25.19	A
40	ATOM	5327	OE1	GLU	A	675	22.873	77.713	-39.816	1.00	26.11	A
	ATOM	5328	OE2	GLU	A	675	22.373	78.042	-37.704	1.00	26.65	A
	ATOM	5329	C	GLU	A	675	27.519	80.198	-39.679	1.00	19.07	A
	ATOM	5330	O	GLU	A	675	27.723	80.767	-40.754	1.00	19.20	A
45	ATOM	5331	N	ILE	A	676	28.403	79.384	-39.115	1.00	18.72	A
	ATOM	5332	CA	ILE	A	676	29.686	79.113	-39.745	1.00	19.45	A
	ATOM	5333	CB	ILE	A	676	30.816	79.902	-39.066	1.00	21.20	A
	ATOM	5334	CG2	ILE	A	676	30.544	81.398	-39.162	1.00	23.12	A
50	ATOM	5335	CG1	ILE	A	676	30.934	79.469	-37.605	1.00	22.04	A
	ATOM	5336	CD1	ILE	A	676	32.131	80.041	-36.886	1.00	23.61	A
	ATOM	5337	C	ILE	A	676	30.042	77.637	-39.665	1.00	18.82	A
	ATOM	5338	O	ILE	A	676	29.551	76.914	-38.796	1.00	18.47	A
55	ATOM	5339	N	SER	A	677	30.905	77.207	-40.577	1.00	18.44	A
	ATOM	5340	CA	SER	A	677	31.370	75.828	-40.630	1.00	18.86	A
	ATOM	5341	CB	SER	A	677	30.769	75.113	-41.842	1.00	20.56	A
	ATOM	5342	OG	SER	A	677	31.231	73.777	-41.925	1.00	24.04	A
55	ATOM	5343	C	SER	A	677	32.889	75.850	-40.743	1.00	18.55	A
	ATOM	5344	O	SER	A	677	33.451	76.667	-41.474	1.00	18.59	A
	ATOM	5345	N	LEU	A	678	33.554	74.956	-40.019	1.00	17.21	A
	ATOM	5346	CA	LEU	A	678	35.009	74.895	-40.039	1.00	17.53	A
	ATOM	5347	CB	LEU	A	678	35.587	75.588	-38.802	1.00	18.74	A

5	ATOM	5348	CG	LEU	A	678	35.405	77.100	-38.669	1.00	19.72	A
	ATOM	5349	CD1	LEU	A	678	35.871	77.548	-37.292	1.00	20.83	A
	ATOM	5350	CD2	LEU	A	678	36.192	77.808	-39.759	1.00	21.63	A
	ATOM	5351	C	LEU	A	678	35.522	73.465	-40.075	1.00	17.34	A
	ATOM	5352	O	LEU	A	678	34.862	72.544	-39.591	1.00	16.69	A
10	ATOM	5353	N	ARG	A	679	36.708	73.295	-40.650	1.00	17.12	A
	ATOM	5354	CA	ARG	A	679	37.344	71.990	-40.733	1.00	18.44	A
	ATOM	5355	CB	ARG	A	679	36.912	71.248	-42.001	1.00	20.29	A
	ATOM	5356	CG	ARG	A	679	37.461	69.829	-42.063	1.00	23.21	A
	ATOM	5357	CD	ARG	A	679	37.211	69.164	-43.403	1.00	25.74	A
15	ATOM	5358	NE	ARG	A	679	37.627	67.765	-43.377	1.00	28.32	A
	ATOM	5359	CZ	ARG	A	679	37.683	66.979	-44.446	1.00	29.41	A
	ATOM	5360	NH1	ARG	A	679	37.352	67.455	-45.639	1.00	30.45	A
	ATOM	5361	NH2	ARG	A	679	38.068	65.716	-44.322	1.00	30.28	A
	ATOM	5362	C	ARG	A	679	38.860	72.146	-40.741	1.00	18.22	A
20	ATOM	5363	O	ARG	A	679	39.412	72.892	-41.548	1.00	17.86	A
	ATOM	5364	N	VAL	A	680	39.528	71.447	-39.831	1.00	17.40	A
	ATOM	5365	CA	VAL	A	680	40.980	71.489	-39.755	1.00	17.92	A
	ATOM	5366	CB	VAL	A	680	41.460	71.762	-38.312	1.00	17.20	A
	ATOM	5367	CG1	VAL	A	680	42.967	71.619	-38.228	1.00	17.12	A
25	ATOM	5368	CG2	VAL	A	680	41.041	73.163	-37.888	1.00	15.30	A
	ATOM	5369	C	VAL	A	680	41.514	70.141	-40.222	1.00	19.22	A
	ATOM	5370	O	VAL	A	680	41.033	69.095	-39.788	1.00	19.39	A
	ATOM	5371	N	GLY	A	681	42.500	70.173	-41.115	1.00	20.72	A
	ATOM	5372	CA	GLY	A	681	43.071	68.943	-41.634	1.00	22.99	A
30	ATOM	5373	C	GLY	A	681	42.000	68.071	-42.262	1.00	24.42	A
	ATOM	5374	O	GLY	A	681	41.101	68.571	-42.937	1.00	24.23	A
	ATOM	5375	N	ASN	A	682	42.098	66.763	-42.046	1.00	26.46	A
	ATOM	5376	CA	ASN	A	682	41.116	65.828	-42.580	1.00	28.26	A
	ATOM	5377	CB	ASN	A	682	41.809	64.595	-43.165	1.00	30.25	A
35	ATOM	5378	CG	ASN	A	682	42.484	64.879	-44.493	1.00	32.05	A
	ATOM	5379	OD1	ASN	A	682	43.151	64.013	-45.058	1.00	34.30	A
	ATOM	5380	ND2	ASN	A	682	42.308	66.093	-45.003	1.00	33.43	A
	ATOM	5381	C	ASN	A	682	40.174	65.411	-41.461	1.00	27.97	A
	ATOM	5382	O	ASN	A	682	39.468	64.408	-41.564	1.00	28.97	A
40	ATOM	5383	N	GLY	A	683	40.172	66.198	-40.389	1.00	26.89	A
	ATOM	5384	CA	GLY	A	683	39.320	65.909	-39.254	1.00	24.95	A
	ATOM	5385	C	GLY	A	683	37.859	66.178	-39.547	1.00	23.15	A
	ATOM	5386	O	GLY	A	683	37.475	66.319	-40.708	1.00	23.65	A
	ATOM	5387	N	PRO	A	684	37.015	66.260	-38.508	1.00	21.20	A
45	ATOM	5388	CD	PRO	A	684	37.343	66.081	-37.081	1.00	21.32	A
	ATOM	5389	CA	PRO	A	684	35.584	66.515	-38.685	1.00	19.81	A
	ATOM	5390	CB	PRO	A	684	35.007	66.164	-37.319	1.00	20.16	A
	ATOM	5391	CG	PRO	A	684	36.099	66.605	-36.391	1.00	20.87	A
	ATOM	5392	C	PRO	A	684	35.272	67.951	-39.088	1.00	18.75	A
50	ATOM	5393	O	PRO	A	684	36.086	68.853	-38.905	1.00	18.07	A
	ATOM	5394	N	THR	A	685	34.087	68.147	-39.651	1.00	17.24	A
	ATOM	5395	CA	THR	A	685	33.634	69.470	-40.051	1.00	16.41	A
	ATOM	5396	CB	THR	A	685	33.020	69.452	-41.462	1.00	16.39	A
	ATOM	5397	OG1	THR	A	685	34.041	69.153	-42.420	1.00	17.54	A
55	ATOM	5398	CG2	THR	A	685	32.400	70.804	-41.791	1.00	16.76	A
	ATOM	5399	C	THR	A	685	32.573	69.863	-39.034	1.00	15.52	A
	ATOM	5400	O	THR	A	685	31.573	69.166	-38.872	1.00	16.19	A
	ATOM	5401	N	LEU	A	686	32.801	70.971	-38.338	1.00	14.31	A
	ATOM	5402	CA	LEU	A	686	31.865	71.429	-37.321	1.00	14.02	A

5	ATOM	5403	CB	LEU	A	686	32.612	71.775	-36.027	1.00	14.50	A
	ATOM	5404	CG	LEU	A	686	33.527	70.713	-35.415	1.00	16.33	A
	ATOM	5405	CD1	LEU	A	686	34.004	71.202	-34.058	1.00	15.65	A
	ATOM	5406	CD2	LEU	A	686	32.796	69.394	-35.273	1.00	16.36	A
	ATOM	5407	C	LEU	A	686	31.073	72.646	-37.770	1.00	13.55	A
10	ATOM	5408	O	LEU	A	686	31.625	73.570	-38.369	1.00	13.84	A
	ATOM	5409	N	ALA	A	687	29.778	72.638	-37.475	1.00	12.69	A
	ATOM	5410	CA	ALA	A	687	28.898	73.746	-37.822	1.00	12.84	A
	ATOM	5411	CB	ALA	A	687	27.683	73.236	-38.592	1.00	12.65	A
	ATOM	5412	C	ALA	A	687	28.454	74.430	-36.534	1.00	12.45	A
15	ATOM	5413	O	ALA	A	687	28.133	73.763	-35.544	1.00	12.43	A
	ATOM	5414	N	PHE	A	688	28.436	75.761	-36.549	1.00	12.17	A
	ATOM	5415	CA	PHE	A	688	28.042	76.535	-35.380	1.00	11.59	A
	ATOM	5416	CB	PHE	A	688	29.215	77.384	-34.884	1.00	11.95	A
	ATOM	5417	CG	PHE	A	688	30.453	76.596	-34.591	1.00	11.60	A
20	ATOM	5418	CD1	PHE	A	688	31.252	76.122	-35.623	1.00	11.51	A
	ATOM	5419	CD2	PHE	A	688	30.810	76.310	-33.278	1.00	11.55	A
	ATOM	5420	CE1	PHE	A	688	32.394	75.369	-35.355	1.00	11.61	A
	ATOM	5421	CE2	PHE	A	688	31.950	75.558	-32.999	1.00	11.40	A
	ATOM	5422	CZ	PHE	A	688	32.743	75.087	-34.039	1.00	11.47	A
25	ATOM	5423	C	PHE	A	688	26.876	77.460	-35.677	1.00	12.06	A
	ATOM	5424	O	PHE	A	688	26.697	77.900	-36.811	1.00	13.38	A
	ATOM	5425	N	SER	A	689	26.091	77.756	-34.649	1.00	12.46	A
	ATOM	5426	CA	SER	A	689	24.955	78.662	-34.780	1.00	13.44	A
	ATOM	5427	CB	SER	A	689	24.022	78.518	-33.579	1.00	13.79	A
30	ATOM	5428	OG	SER	A	689	24.633	79.032	-32.407	1.00	14.51	A
	ATOM	5429	C	SER	A	689	25.518	80.081	-34.806	1.00	14.49	A
	ATOM	5430	O	SER	A	689	26.713	80.282	-34.590	1.00	14.70	A
	ATOM	5431	N	GLU	A	690	24.665	81.066	-35.066	1.00	15.35	A
	ATOM	5432	CA	GLU	A	690	25.133	82.447	-35.096	1.00	16.16	A
35	ATOM	5433	CB	GLU	A	690	24.073	83.367	-35.713	1.00	18.48	A
	ATOM	5434	CG	GLU	A	690	22.813	83.539	-34.896	1.00	21.37	A
	ATOM	5435	CD	GLU	A	690	21.855	84.530	-35.532	1.00	23.24	A
	ATOM	5436	OE1	GLU	A	690	21.335	84.233	-36.628	1.00	25.21	A
	ATOM	5437	OE2	GLU	A	690	21.632	85.608	-34.941	1.00	25.58	A
40	ATOM	5438	C	GLU	A	690	25.493	82.926	-33.691	1.00	16.10	A
	ATOM	5439	O	GLU	A	690	25.997	84.035	-33.513	1.00	15.36	A
	ATOM	5440	N	GLN	A	691	25.232	82.084	-32.695	1.00	15.90	A
	ATOM	5441	CA	GLN	A	691	25.554	82.413	-31.310	1.00	16.38	A
	ATOM	5442	CB	GLN	A	691	24.451	81.913	-30.378	1.00	18.37	A
45	ATOM	5443	CG	GLN	A	691	23.129	82.632	-30.574	1.00	21.65	A
	ATOM	5444	CD	GLN	A	691	21.940	81.747	-30.275	1.00	24.27	A
	ATOM	5445	OE1	GLN	A	691	21.755	81.289	-29.148	1.00	25.45	A
	ATOM	5446	NE2	GLN	A	691	21.125	81.495	-31.293	1.00	25.38	A
	ATOM	5447	C	GLN	A	691	26.892	81.783	-30.928	1.00	14.99	A
50	ATOM	5448	O	GLN	A	691	27.304	81.830	-29.769	1.00	16.19	A
	ATOM	5449	N	GLY	A	692	27.557	81.187	-31.915	1.00	13.74	A
	ATOM	5450	CA	GLY	A	692	28.856	80.576	-31.689	1.00	13.44	A
	ATOM	5451	C	GLY	A	692	28.843	79.231	-30.992	1.00	12.84	A
	ATOM	5452	O	GLY	A	692	29.870	78.788	-30.482	1.00	12.87	A
55	ATOM	5453	N	LEU	A	693	27.690	78.572	-30.982	1.00	12.59	A
	ATOM	5454	CA	LEU	A	693	27.563	77.270	-30.333	1.00	12.95	A
	ATOM	5455	CB	LEU	A	693	26.332	77.257	-29.427	1.00	14.47	A
	ATOM	5456	CG	LEU	A	693	26.373	78.185	-28.211	1.00	15.50	A
	ATOM	5457	CD1	LEU	A	693	24.963	78.374	-27.671	1.00	16.99	A

5	ATOM	5458	CD2	LEU	A	693	27.294	77.606	-27.143	1.00	16.14	A
	ATOM	5459	C	LEU	A	693	27.460	76.141	-31.347	1.00	12.58	A
	ATOM	5460	O	LEU	A	693	26.797	76.269	-32.377	1.00	13.69	A
	ATOM	5461	N	LEU	A	694	28.121	75.030	-31.045	1.00	12.10	A
	ATOM	5462	CA	LEU	A	694	28.107	73.868	-31.921	1.00	12.19	A
	ATOM	5463	CB	LEU	A	694	28.833	72.702	-31.246	1.00	11.89	A
	ATOM	5464	CG	LEU	A	694	29.022	71.436	-32.082	1.00	12.29	A
	ATOM	5465	CD1	LEU	A	694	29.975	71.722	-33.223	1.00	12.88	A
10	ATOM	5466	CD2	LEU	A	694	29.583	70.320	-31.207	1.00	12.25	A
	ATOM	5467	C	LEU	A	694	26.681	73.445	-32.261	1.00	12.42	A
	ATOM	5468	O	LEU	A	694	25.807	73.430	-31.397	1.00	12.36	A
	ATOM	5469	N	LYS	A	695	26.460	73.101	-33.527	1.00	13.99	A
15	ATOM	5470	CA	LYS	A	695	25.146	72.662	-33.989	1.00	15.49	A
	ATOM	5471	CB	LYS	A	695	24.586	73.660	-35.011	1.00	18.76	A
	ATOM	5472	CG	LYS	A	695	23.323	73.196	-35.720	1.00	23.70	A
	ATOM	5473	CD	LYS	A	695	22.622	74.345	-36.438	1.00	25.84	A
	ATOM	5474	CE	LYS	A	695	22.035	75.337	-35.442	1.00	27.62	A
20	ATOM	5475	NZ	LYS	A	695	21.248	76.413	-36.105	1.00	29.16	A
	ATOM	5476	C	LYS	A	695	25.195	71.266	-34.601	1.00	14.81	A
	ATOM	5477	O	LYS	A	695	24.228	70.509	-34.502	1.00	15.17	A
	ATOM	5478	N	SER	A	696	26.316	70.923	-35.228	1.00	14.07	A
	ATOM	5479	CA	SER	A	696	26.461	69.612	-35.854	1.00	14.25	A
25	ATOM	5480	CB	SER	A	696	25.703	69.574	-37.189	1.00	15.32	A
	ATOM	5481	OG	SER	A	696	26.328	70.388	-38.168	1.00	16.47	A
	ATOM	5482	C	SER	A	696	27.917	69.232	-36.092	1.00	14.33	A
	ATOM	5483	O	SER	A	696	28.802	70.093	-36.124	1.00	13.52	A
	ATOM	5484	N	ILE	A	697	28.151	67.932	-36.256	1.00	13.96	A
30	ATOM	5485	CA	ILE	A	697	29.483	67.393	-36.508	1.00	14.22	A
	ATOM	5486	CB	ILE	A	697	30.032	66.600	-35.293	1.00	13.78	A
	ATOM	5487	CG2	ILE	A	697	31.390	66.011	-35.637	1.00	13.83	A
	ATOM	5488	CG1	ILE	A	697	30.148	67.504	-34.066	1.00	12.86	A
	ATOM	5489	CD1	ILE	A	697	30.618	66.766	-32.813	1.00	12.78	A
35	ATOM	5490	C	ILE	A	697	29.424	66.422	-37.683	1.00	15.65	A
	ATOM	5491	O	ILE	A	697	28.589	65.518	-37.700	1.00	16.00	A
	ATOM	5492	N	GLN	A	698	30.306	66.614	-38.658	1.00	15.69	A
	ATOM	5493	CA	GLN	A	698	30.370	65.729	-39.816	1.00	17.15	A
	ATOM	5494	CB	GLN	A	698	30.268	66.519	-41.123	1.00	18.03	A
40	ATOM	5495	CG	GLN	A	698	29.969	65.629	-42.324	1.00	19.29	A
	ATOM	5496	CD	GLN	A	698	30.226	66.307	-43.654	1.00	20.84	A
	ATOM	5497	OE1	GLN	A	698	29.680	65.904	-44.683	1.00	22.50	A
	ATOM	5498	NE2	GLN	A	698	31.073	67.327	-43.647	1.00	20.89	A
	ATOM	5499	C	GLN	A	698	31.726	65.043	-39.743	1.00	17.98	A
45	ATOM	5500	O	GLN	A	698	32.758	65.675	-39.957	1.00	17.04	A
	ATOM	5501	N	LEU	A	699	31.725	63.748	-39.440	1.00	19.25	A
	ATOM	5502	CA	LEU	A	699	32.970	63.000	-39.306	1.00	21.55	A
	ATOM	5503	CB	LEU	A	699	32.673	61.570	-38.841	1.00	21.34	A
	ATOM	5504	CG	LEU	A	699	32.002	61.458	-37.469	1.00	21.19	A
50	ATOM	5505	CD1	LEU	A	699	31.836	59.991	-37.098	1.00	20.78	A
	ATOM	5506	CD2	LEU	A	699	32.844	62.180	-36.426	1.00	20.96	A
	ATOM	5507	C	LEU	A	699	33.829	62.966	-40.564	1.00	23.75	A
	ATOM	5508	O	LEU	A	699	35.041	63.176	-40.498	1.00	23.54	A
	ATOM	5509	N	THR	A	700	33.205	62.700	-41.706	1.00	26.14	A
55	ATOM	5510	CA	THR	A	700	33.930	62.644	-42.969	1.00	29.36	A
	ATOM	5511	CB	THR	A	700	34.070	61.192	-43.472	1.00	29.32	A
	ATOM	5512	OG1	THR	A	700	32.770	60.641	-43.717	1.00	29.71	A

5	ATOM	5513	CG2	THR	A	700	34.790	60.339	-42.439	1.00	29.80	A
	ATOM	5514	C	THR	A	700	33.214	63.465	-44.034	1.00	31.01	A
	ATOM	5515	O	THR	A	700	32.058	63.849	-43.863	1.00	31.06	A
	ATOM	5516	N	GLN	A	701	33.908	63.734	-45.135	1.00	33.87	A
	ATOM	5517	CA	GLN	A	701	33.334	64.515	-46.223	1.00	36.58	A
10	ATOM	5518	CB	GLN	A	701	34.371	64.714	-47.331	1.00	38.30	A
	ATOM	5519	CG	GLN	A	701	35.669	65.340	-46.849	1.00	40.75	A
	ATOM	5520	CD	GLN	A	701	36.609	65.693	-47.985	1.00	42.07	A
	ATOM	5521	OE1	GLN	A	701	36.275	66.501	-48.852	1.00	42.75	A
	ATOM	5522	NE2	GLN	A	701	37.793	65.089	-47.985	1.00	42.60	A
15	ATOM	5523	C	GLN	A	701	32.096	63.830	-46.793	1.00	37.22	A
	ATOM	5524	O	GLN	A	701	31.206	64.487	-47.333	1.00	37.80	A
	ATOM	5525	N	ASP	A	702	32.045	62.509	-46.659	1.00	37.89	A
	ATOM	5526	CA	ASP	A	702	30.924	61.725	-47.164	1.00	38.35	A
	ATOM	5527	CB	ASP	A	702	31.383	60.299	-47.477	1.00	39.66	A
20	ATOM	5528	CG	ASP	A	702	32.727	60.259	-48.174	1.00	40.51	A
	ATOM	5529	OD1	ASP	A	702	32.854	60.852	-49.267	1.00	40.84	A
	ATOM	5530	OD2	ASP	A	702	33.659	59.633	-47.624	1.00	41.15	A
	ATOM	5531	C	ASP	A	702	29.784	61.668	-46.152	1.00	37.81	A
	ATOM	5532	O	ASP	A	702	28.623	61.901	-46.492	1.00	38.20	A
25	ATOM	5533	N	SER	A	703	30.130	61.355	-44.907	1.00	36.53	A
	ATOM	5534	CA	SER	A	703	29.155	61.244	-43.829	1.00	34.85	A
	ATOM	5535	CB	SER	A	703	29.877	61.019	-42.498	1.00	35.05	A
	ATOM	5536	OG	SER	A	703	30.729	62.108	-42.191	1.00	34.27	A
	ATOM	5537	C	SER	A	703	28.242	62.462	-43.715	1.00	33.65	A
30	ATOM	5538	O	SER	A	703	28.536	63.527	-44.256	1.00	33.57	A
	ATOM	5539	N	PRO	A	704	27.109	62.310	-43.008	1.00	32.60	A
	ATOM	5540	CD	PRO	A	704	26.549	61.025	-42.547	1.00	32.80	A
	ATOM	5541	CA	PRO	A	704	26.141	63.393	-42.816	1.00	31.41	A
	ATOM	5542	CB	PRO	A	704	24.836	62.639	-42.613	1.00	32.30	A
35	ATOM	5543	CG	PRO	A	704	25.286	61.454	-41.823	1.00	32.47	A
	ATOM	5544	C	PRO	A	704	26.468	64.304	-41.632	1.00	30.08	A
	ATOM	5545	O	PRO	A	704	27.347	64.003	-40.824	1.00	29.54	A
	ATOM	5546	N	HIS	A	705	25.750	65.420	-41.543	1.00	28.15	A
	ATOM	5547	CA	HIS	A	705	25.939	66.380	-40.461	1.00	26.08	A
40	ATOM	5548	CB	HIS	A	705	25.513	67.777	-40.917	1.00	27.16	A
	ATOM	5549	CG	HIS	A	705	26.327	68.315	-42.051	1.00	28.61	A
	ATOM	5550	CD2	HIS	A	705	26.004	68.560	-43.343	1.00	29.18	A
	ATOM	5551	ND1	HIS	A	705	27.659	68.644	-41.921	1.00	28.94	A
	ATOM	5552	CE1	HIS	A	705	28.122	69.067	-43.084	1.00	29.49	A
45	ATOM	5553	NE2	HIS	A	705	27.138	69.025	-43.964	1.00	29.86	A
	ATOM	5554	C	HIS	A	705	25.107	65.948	-39.259	1.00	24.00	A
	ATOM	5555	O	HIS	A	705	23.914	66.235	-39.178	1.00	23.98	A
	ATOM	5556	N	VAL	A	706	25.747	65.256	-38.322	1.00	21.51	A
	ATOM	5557	CA	VAL	A	706	25.063	64.772	-37.132	1.00	18.99	A
50	ATOM	5558	CB	VAL	A	706	25.909	63.709	-36.407	1.00	18.10	A
	ATOM	5559	CG1	VAL	A	706	25.145	63.165	-35.214	1.00	17.35	A
	ATOM	5560	CG2	VAL	A	706	26.273	62.593	-37.370	1.00	18.04	A
	ATOM	5561	C	VAL	A	706	24.745	65.886	-36.141	1.00	18.65	A
	ATOM	5562	O	VAL	A	706	25.638	66.602	-35.695	1.00	17.89	A
55	ATOM	5563	N	PRO	A	707	23.462	66.046	-35.787	1.00	17.80	A
	ATOM	5564	CD	PRO	A	707	22.283	65.387	-36.380	1.00	18.52	A
	ATOM	5565	CA	PRO	A	707	23.053	67.084	-34.838	1.00	17.47	A
	ATOM	5566	CB	PRO	A	707	21.532	66.942	-34.802	1.00	18.04	A
	ATOM	5567	CG	PRO	A	707	21.209	66.424	-36.175	1.00	18.64	A

5	ATOM	5568	C	PRO	A	707	23.678	66.892	-33.455	1.00	16.45	A
	ATOM	5569	O	PRO	A	707	23.489	65.860	-32.809	1.00	16.71	A
	ATOM	5570	N	VAL	A	708	24.441	67.891	-33.025	1.00	15.43	A
	ATOM	5571	CA	VAL	A	708	25.093	67.896	-31.719	1.00	14.68	A
	ATOM	5572	CB	VAL	A	708	26.551	67.393	-31.802	1.00	14.15	A
10	ATOM	5573	CG1	VAL	A	708	27.195	67.426	-30.417	1.00	13.61	A
	ATOM	5574	CG2	VAL	A	708	26.579	65.977	-32.361	1.00	14.23	A
	ATOM	5575	C	VAL	A	708	25.070	69.367	-31.323	1.00	14.72	A
	ATOM	5576	O	VAL	A	708	25.855	70.170	-31.831	1.00	15.38	A
	ATOM	5577	N	HIS	A	709	24.153	69.716	-30.431	1.00	14.54	A
15	ATOM	5578	CA	HIS	A	709	23.990	71.101	-30.011	1.00	15.48	A
	ATOM	5579	CB	HIS	A	709	22.525	71.519	-30.163	1.00	17.30	A
	ATOM	5580	CG	HIS	A	709	22.015	71.462	-31.568	1.00	20.53	A
	ATOM	5581	CD2	HIS	A	709	21.881	70.425	-32.429	1.00	21.41	A
	ATOM	5582	ND1	HIS	A	709	21.546	72.574	-32.233	1.00	22.57	A
20	ATOM	5583	CE1	HIS	A	709	21.144	72.226	-33.442	1.00	22.45	A
	ATOM	5584	NE2	HIS	A	709	21.337	70.927	-33.587	1.00	21.98	A
	ATOM	5585	C	HIS	A	709	24.421	71.403	-28.586	1.00	14.93	A
	ATOM	5586	O	HIS	A	709	24.001	70.731	-27.647	1.00	14.53	A
	ATOM	5587	N	PHE	A	710	25.258	72.424	-28.435	1.00	13.24	A
25	ATOM	5588	CA	PHE	A	710	25.707	72.864	-27.123	1.00	13.07	A
	ATOM	5589	CB	PHE	A	710	27.122	73.446	-27.192	1.00	13.58	A
	ATOM	5590	CG	PHE	A	710	28.199	72.500	-26.726	1.00	13.26	A
	ATOM	5591	CD1	PHE	A	710	29.349	72.310	-27.484	1.00	14.61	A
	ATOM	5592	CD2	PHE	A	710	28.075	71.820	-25.516	1.00	13.82	A
30	ATOM	5593	CE1	PHE	A	710	30.364	71.457	-27.043	1.00	14.19	A
	ATOM	5594	CE2	PHE	A	710	29.084	70.966	-25.067	1.00	13.68	A
	ATOM	5595	CZ	PHE	A	710	30.228	70.786	-25.832	1.00	14.33	A
	ATOM	5596	C	PHE	A	710	24.727	73.943	-26.676	1.00	13.63	A
	ATOM	5597	O	PHE	A	710	24.308	74.791	-27.473	1.00	13.76	A
35	ATOM	5598	N	LYS	A	711	24.359	73.905	-25.404	1.00	13.07	A
	ATOM	5599	CA	LYS	A	711	23.427	74.871	-24.847	1.00	14.24	A
	ATOM	5600	CB	LYS	A	711	21.991	74.351	-24.992	1.00	16.69	A
	ATOM	5601	CG	LYS	A	711	20.926	75.268	-24.410	1.00	18.89	A
	ATOM	5602	CD	LYS	A	711	19.534	74.651	-24.516	1.00	20.95	A
40	ATOM	5603	CE	LYS	A	711	19.101	74.480	-25.964	1.00	21.44	A
	ATOM	5604	NZ	LYS	A	711	17.747	73.861	-26.067	1.00	22.65	A
	ATOM	5605	C	LYS	A	711	23.751	75.089	-23.378	1.00	14.02	A
	ATOM	5606	O	LYS	A	711	24.144	74.155	-22.678	1.00	14.38	A
	ATOM	5607	N	PHE	A	712	23.609	76.325	-22.917	1.00	12.94	A
45	ATOM	5608	CA	PHE	A	712	23.861	76.641	-21.521	1.00	12.60	A
	ATOM	5609	CB	PHE	A	712	24.859	77.799	-21.384	1.00	13.19	A
	ATOM	5610	CG	PHE	A	712	26.279	77.412	-21.691	1.00	12.74	A
	ATOM	5611	CD1	PHE	A	712	26.761	77.449	-22.996	1.00	12.90	A
	ATOM	5612	CD2	PHE	A	712	27.125	76.976	-20.675	1.00	12.44	A
50	ATOM	5613	CE1	PHE	A	712	28.066	77.057	-23.288	1.00	13.16	A
	ATOM	5614	CE2	PHE	A	712	28.428	76.582	-20.953	1.00	12.13	A
	ATOM	5615	CZ	PHE	A	712	28.903	76.621	-22.262	1.00	12.53	A
	ATOM	5616	C	PHE	A	712	22.549	76.994	-20.838	1.00	12.78	A
	ATOM	5617	O	PHE	A	712	21.752	77.773	-21.365	1.00	12.67	A
55	ATOM	5618	N	LEU	A	713	22.324	76.401	-19.672	1.00	12.69	A
	ATOM	5619	CA	LEU	A	713	21.105	76.643	-18.916	1.00	12.88	A
	ATOM	5620	CB	LEU	A	713	20.166	75.435	-19.013	1.00	13.49	A
	ATOM	5621	CG	LEU	A	713	19.790	74.962	-20.421	1.00	13.72	A
	ATOM	5622	CD1	LEU	A	713	20.763	73.884	-20.883	1.00	14.92	A

5	ATOM	5623	CD2	LEU	A	713	18.365	74.407	-20.414	1.00	14.75	A
	ATOM	5624	C	LEU	A	713	21.447	76.915	-17.461	1.00	13.49	A
	ATOM	5625	O	LEU	A	713	22.605	76.806	-17.054	1.00	13.14	A
	ATOM	5626	N	LYS	A	714	20.441	77.274	-16.674	1.00	13.55	A
	ATOM	5627	CA	LYS	A	714	20.676	77.554	-15.270	1.00	14.74	A
10	ATOM	5628	CB	LYS	A	714	20.715	79.066	-15.034	1.00	17.89	A
	ATOM	5629	CG	LYS	A	714	19.463	79.798	-15.483	1.00	20.78	A
	ATOM	5630	CD	LYS	A	714	19.519	81.279	-15.113	1.00	23.52	A
	ATOM	5631	CE	LYS	A	714	20.706	81.976	-15.763	1.00	25.00	A
	ATOM	5632	NZ	LYS	A	714	20.789	83.418	-15.394	1.00	26.77	A
15	ATOM	5633	C	LYS	A	714	19.637	76.933	-14.354	1.00	14.83	A
	ATOM	5634	O	LYS	A	714	18.448	76.890	-14.674	1.00	15.62	A
	ATOM	5635	N	TYR	A	715	20.108	76.429	-13.220	1.00	13.72	A
	ATOM	5636	CA	TYR	A	715	19.234	75.853	-12.212	1.00	12.72	A
	ATOM	5637	CB	TYR	A	715	19.814	74.563	-11.624	1.00	12.76	A
20	ATOM	5638	CG	TYR	A	715	19.709	73.345	-12.507	1.00	11.86	A
	ATOM	5639	CD1	TYR	A	715	20.797	72.912	-13.266	1.00	11.71	A
	ATOM	5640	CE1	TYR	A	715	20.717	71.766	-14.053	1.00	10.85	A
	ATOM	5641	CD2	TYR	A	715	18.530	72.601	-12.561	1.00	11.46	A
	ATOM	5642	CE2	TYR	A	715	18.438	71.453	-13.345	1.00	12.03	A
25	ATOM	5643	CZ	TYR	A	715	19.535	71.039	-14.088	1.00	11.99	A
	ATOM	5644	OH	TYR	A	715	19.452	69.898	-14.853	1.00	12.00	A
	ATOM	5645	C	TYR	A	715	19.149	76.884	-11.097	1.00	13.26	A
	ATOM	5646	O	TYR	A	715	20.106	77.619	-10.848	1.00	13.06	A
	ATOM	5647	N	GLY	A	716	18.004	76.934	-10.429	1.00	13.36	A
30	ATOM	5648	CA	GLY	A	716	17.832	77.871	-9.338	1.00	13.61	A
	ATOM	5649	C	GLY	A	716	17.746	77.146	-8.010	1.00	15.27	A
	ATOM	5650	O	GLY	A	716	18.096	75.965	-7.906	1.00	15.61	A
	ATOM	5651	N	VAL	A	717	17.270	77.858	-6.997	1.00	15.67	A
	ATOM	5652	CA	VAL	A	717	17.123	77.316	-5.655	1.00	16.91	A
35	ATOM	5653	CB	VAL	A	717	18.060	78.055	-4.672	1.00	16.38	A
	ATOM	5654	CG1	VAL	A	717	17.825	77.577	-3.252	1.00	17.56	A
	ATOM	5655	CG2	VAL	A	717	19.512	77.823	-5.076	1.00	16.85	A
	ATOM	5656	C	VAL	A	717	15.670	77.474	-5.217	1.00	17.83	A
	ATOM	5657	O	VAL	A	717	14.981	78.398	-5.650	1.00	18.06	A
40	ATOM	5658	N	ARG	A	718	15.204	76.569	-4.364	1.00	18.88	A
	ATOM	5659	CA	ARG	A	718	13.826	76.607	-3.889	1.00	20.57	A
	ATOM	5660	CB	ARG	A	718	13.470	75.274	-3.232	1.00	19.83	A
	ATOM	5661	CG	ARG	A	718	13.580	74.112	-4.198	1.00	19.14	A
	ATOM	5662	CD	ARG	A	718	13.483	72.765	-3.511	1.00	18.32	A
45	ATOM	5663	NE	ARG	A	718	13.768	71.695	-4.460	1.00	17.75	A
	ATOM	5664	CZ	ARG	A	718	13.765	70.401	-4.161	1.00	17.53	A
	ATOM	5665	NH1	ARG	A	718	13.485	69.999	-2.928	1.00	17.28	A
	ATOM	5666	NH2	ARG	A	718	14.048	69.508	-5.101	1.00	17.74	A
	ATOM	5667	C	ARG	A	718	13.562	77.753	-2.924	1.00	22.46	A
50	ATOM	5668	O	ARG	A	718	14.398	78.078	-2.085	1.00	22.85	A
	ATOM	5669	N	SER	A	719	12.391	78.365	-3.059	1.00	24.66	A
	ATOM	5670	CA	SER	A	719	12.000	79.475	-2.201	1.00	27.21	A
	ATOM	5671	CB	SER	A	719	11.082	80.431	-2.966	1.00	27.33	A
	ATOM	5672	OG	SER	A	719	9.936	79.751	-3.447	1.00	28.77	A
55	ATOM	5673	C	SER	A	719	11.280	78.942	-0.969	1.00	28.70	A
	ATOM	5674	O	SER	A	719	10.976	79.690	-0.039	1.00	29.02	A
	ATOM	5675	N	HIS	A	720	11.009	77.641	-0.977	1.00	30.58	A
	ATOM	5676	CA	HIS	A	720	10.328	76.981	0.128	1.00	32.12	A
	ATOM	5677	CB	HIS	A	720	8.873	76.683	-0.246	1.00	34.89	A

5	ATOM	5678	CG	HIS	A	720	8.133	77.865	-0.791	1.00	37.77	A
	ATOM	5679	CD2	HIS	A	720	7.534	78.066	-1.989	1.00	38.94	A
	ATOM	5680	ND1	HIS	A	720	7.945	79.024	-0.069	1.00	39.13	A
	ATOM	5681	CE1	HIS	A	720	7.262	79.888	-0.799	1.00	39.81	A
	ATOM	5682	NE2	HIS	A	720	7.001	79.331	-1.968	1.00	39.76	A
	ATOM	5683	C	HIS	A	720	11.042	75.670	0.443	1.00	31.40	A
	ATOM	5684	O	HIS	A	720	11.506	74.977	-0.462	1.00	31.75	A
	ATOM	5685	N	GLY	A	721	11.133	75.337	1.726	1.00	30.13	A
	ATOM	5686	CA	GLY	A	721	11.782	74.100	2.119	1.00	28.34	A
	ATOM	5687	C	GLY	A	721	13.299	74.148	2.131	1.00	26.81	A
10	ATOM	5688	O	GLY	A	721	13.900	75.210	2.278	1.00	26.70	A
	ATOM	5689	N	ASP	A	722	13.912	72.980	1.964	1.00	24.89	A
	ATOM	5690	CA	ASP	A	722	15.365	72.837	1.970	1.00	22.79	A
	ATOM	5691	CB	ASP	A	722	15.726	71.351	1.955	1.00	21.90	A
	ATOM	5692	CG	ASP	A	722	15.174	70.607	3.158	1.00	22.17	A
15	ATOM	5693	OD1	ASP	A	722	15.057	69.367	3.086	1.00	21.82	A
	ATOM	5694	OD2	ASP	A	722	14.865	71.261	4.179	1.00	21.77	A
	ATOM	5695	C	ASP	A	722	16.045	73.544	0.801	1.00	21.36	A
	ATOM	5696	O	ASP	A	722	15.605	73.440	-0.343	1.00	20.27	A
	ATOM	5697	N	ARG	A	723	17.127	74.257	1.102	1.00	20.52	A
20	ATOM	5698	CA	ARG	A	723	17.880	74.988	0.089	1.00	20.03	A
	ATOM	5699	CB	ARG	A	723	18.196	76.408	0.572	1.00	22.97	A
	ATOM	5700	CG	ARG	A	723	17.039	77.396	0.483	1.00	27.93	A
	ATOM	5701	CD	ARG	A	723	15.997	77.176	1.566	1.00	31.86	A
	ATOM	5702	NE	ARG	A	723	14.917	78.157	1.468	1.00	35.16	A
25	ATOM	5703	CZ	ARG	A	723	13.956	78.314	2.374	1.00	36.54	A
	ATOM	5704	NH1	ARG	A	723	13.931	77.555	3.462	1.00	37.74	A
	ATOM	5705	NH2	ARG	A	723	13.019	79.236	2.194	1.00	37.45	A
	ATOM	5706	C	ARG	A	723	19.188	74.300	-0.286	1.00	18.02	A
	ATOM	5707	O	ARG	A	723	19.798	73.602	0.528	1.00	16.96	A
30	ATOM	5708	N	SER	A	724	19.612	74.508	-1.528	1.00	16.11	A
	ATOM	5709	CA	SER	A	724	20.857	73.940	-2.017	1.00	14.57	A
	ATOM	5710	CB	SER	A	724	20.993	74.174	-3.521	1.00	14.09	A
	ATOM	5711	OG	SER	A	724	19.919	73.589	-4.227	1.00	13.67	A
	ATOM	5712	C	SER	A	724	22.023	74.610	-1.302	1.00	13.51	A
35	ATOM	5713	O	SER	A	724	21.949	75.786	-0.932	1.00	14.47	A
	ATOM	5714	N	GLY	A	725	23.101	73.855	-1.120	1.00	12.12	A
	ATOM	5715	CA	GLY	A	725	24.286	74.378	-0.466	1.00	10.74	A
	ATOM	5716	C	GLY	A	725	25.497	73.661	-1.030	1.00	9.87	A
	ATOM	5717	O	GLY	A	725	25.408	73.054	-2.093	1.00	10.42	A
40	ATOM	5718	N	ALA	A	726	26.623	73.718	-0.325	1.00	10.23	A
	ATOM	5719	CA	ALA	A	726	27.844	73.068	-0.785	1.00	9.51	A
	ATOM	5720	CB	ALA	A	726	28.981	73.331	0.200	1.00	10.07	A
	ATOM	5721	C	ALA	A	726	27.696	71.564	-1.004	1.00	10.03	A
	ATOM	5722	O	ALA	A	726	28.359	70.995	-1.876	1.00	9.75	A
45	ATOM	5723	N	TYR	A	727	26.839	70.918	-0.216	1.00	9.25	A
	ATOM	5724	CA	TYR	A	727	26.648	69.475	-0.343	1.00	9.04	A
	ATOM	5725	CB	TYR	A	727	26.434	68.811	1.025	1.00	9.17	A
	ATOM	5726	CG	TYR	A	727	27.431	69.165	2.099	1.00	9.57	A
	ATOM	5727	CD1	TYR	A	727	27.306	70.345	2.833	1.00	10.21	A
50	ATOM	5728	CE1	TYR	A	727	28.201	70.656	3.851	1.00	10.74	A
	ATOM	5729	CD2	TYR	A	727	28.486	68.305	2.407	1.00	10.18	A
	ATOM	5730	CE2	TYR	A	727	29.386	68.609	3.422	1.00	10.51	A
	ATOM	5731	CZ	TYR	A	727	29.237	69.783	4.142	1.00	10.60	A
	ATOM	5732	OH	TYR	A	727	30.101	70.075	5.170	1.00	11.18	A

5	ATOM	5733	C	TYR	A	727	25.456	69.084	-1.200	1.00	9.43	A
	ATOM	5734	O	TYR	A	727	25.570	68.247	-2.096	1.00	9.80	A
	ATOM	5735	N	LEU	A	728	24.314	69.695	-0.907	1.00	9.86	A
	ATOM	5736	CA	LEU	A	728	23.060	69.371	-1.576	1.00	10.29	A
	ATOM	5737	CB	LEU	A	728	21.906	69.519	-0.581	1.00	10.54	A
10	ATOM	5738	CG	LEU	A	728	22.078	68.918	0.817	1.00	9.48	A
	ATOM	5739	CD1	LEU	A	728	20.799	69.151	1.618	1.00	11.57	A
	ATOM	5740	CD2	LEU	A	728	22.398	67.434	0.725	1.00	10.76	A
	ATOM	5741	C	LEU	A	728	22.687	70.135	-2.836	1.00	10.59	A
	ATOM	5742	O	LEU	A	728	22.895	71.343	-2.938	1.00	11.53	A
15	ATOM	5743	N	PHE	A	729	22.115	69.399	-3.786	1.00	11.08	A
	ATOM	5744	CA	PHE	A	729	21.625	69.956	-5.040	1.00	11.31	A
	ATOM	5745	CB	PHE	A	729	22.157	69.154	-6.233	1.00	10.97	A
	ATOM	5746	CG	PHE	A	729	21.677	69.653	-7.576	1.00	10.34	A
	ATOM	5747	CD1	PHE	A	729	21.609	68.783	-8.659	1.00	10.55	A
20	ATOM	5748	CD2	PHE	A	729	21.322	70.990	-7.766	1.00	11.51	A
	ATOM	5749	CE1	PHE	A	729	21.194	69.228	-9.910	1.00	10.69	A
	ATOM	5750	CE2	PHE	A	729	20.906	71.447	-9.020	1.00	10.06	A
	ATOM	5751	CZ	PHE	A	729	20.843	70.563	-10.092	1.00	11.02	A
	ATOM	5752	C	PHE	A	729	20.109	69.792	-4.940	1.00	11.73	A
25	ATOM	5753	O	PHE	A	729	19.589	68.682	-5.040	1.00	11.22	A
	ATOM	5754	N	LEU	A	730	19.408	70.900	-4.725	1.00	12.20	A
	ATOM	5755	CA	LEU	A	730	17.955	70.886	-4.592	1.00	13.36	A
	ATOM	5756	CB	LEU	A	730	17.564	71.222	-3.151	1.00	13.41	A
	ATOM	5757	CG	LEU	A	730	17.990	70.185	-2.104	1.00	13.71	A
30	ATOM	5758	CD1	LEU	A	730	17.919	70.781	-0.712	1.00	13.88	A
	ATOM	5759	CD2	LEU	A	730	17.095	68.961	-2.208	1.00	14.18	A
	ATOM	5760	C	LEU	A	730	17.371	71.910	-5.552	1.00	13.24	A
	ATOM	5761	O	LEU	A	730	16.881	72.961	-5.139	1.00	13.97	A
	ATOM	5762	N	PRO	A	731	17.414	71.607	-6.857	1.00	13.87	A
35	ATOM	5763	CD	PRO	A	731	17.825	70.324	-7.455	1.00	13.91	A
	ATOM	5764	CA	PRO	A	731	16.893	72.513	-7.882	1.00	14.19	A
	ATOM	5765	CB	PRO	A	731	17.232	71.788	-9.177	1.00	13.69	A
	ATOM	5766	CG	PRO	A	731	17.111	70.346	-8.782	1.00	13.97	A
	ATOM	5767	C	PRO	A	731	15.409	72.819	-7.769	1.00	15.00	A
40	ATOM	5768	O	PRO	A	731	14.627	72.015	-7.257	1.00	14.35	A
	ATOM	5769	N	ASN	A	732	15.033	73.998	-8.249	1.00	16.03	A
	ATOM	5770	CA	ASN	A	732	13.640	74.412	-8.242	1.00	17.20	A
	ATOM	5771	CB	ASN	A	732	13.531	75.915	-7.954	1.00	18.72	A
	ATOM	5772	CG	ASN	A	732	14.202	76.766	-9.013	1.00	19.71	A
45	ATOM	5773	OD1	ASN	A	732	15.289	76.446	-9.485	1.00	21.05	A
	ATOM	5774	ND2	ASN	A	732	13.559	77.871	-9.380	1.00	21.04	A
	ATOM	5775	C	ASN	A	732	13.084	74.075	-9.620	1.00	16.86	A
	ATOM	5776	O	ASN	A	732	12.561	74.936	-10.330	1.00	17.62	A
	ATOM	5777	N	GLY	A	733	13.222	72.806	-9.993	1.00	15.74	A
50	ATOM	5778	CA	GLY	A	733	12.737	72.343	-11.281	1.00	16.20	A
	ATOM	5779	C	GLY	A	733	13.820	72.251	-12.340	1.00	15.85	A
	ATOM	5780	O	GLY	A	733	14.979	72.600	-12.084	1.00	15.63	A
	ATOM	5781	N	PRO	A	734	13.475	71.774	-13.546	1.00	15.55	A
	ATOM	5782	CD	PRO	A	734	12.159	71.236	-13.935	1.00	16.13	A
55	ATOM	5783	CA	PRO	A	734	14.433	71.643	-14.646	1.00	15.56	A
	ATOM	5784	CB	PRO	A	734	13.565	71.152	-15.801	1.00	16.06	A
	ATOM	5785	CG	PRO	A	734	12.510	70.353	-15.106	1.00	17.37	A
	ATOM	5786	C	PRO	A	734	15.091	72.983	-14.953	1.00	15.30	A
	ATOM	5787	O	PRO	A	734	14.519	74.042	-14.691	1.00	14.97	A

5	ATOM	5788	N	ALA	A	735	16.288	72.926	-15.525	1.00	15.31	A
	ATOM	5789	CA	ALA	A	735	17.041	74.128	-15.856	1.00	15.45	A
	ATOM	5790	CB	ALA	A	735	18.440	73.745	-16.324	1.00	15.38	A
	ATOM	5791	C	ALA	A	735	16.355	74.991	-16.910	1.00	16.40	A
	ATOM	5792	O	ALA	A	735	15.641	74.488	-17.777	1.00	16.52	A
10	ATOM	5793	N	SER	A	736	16.584	76.298	-16.816	1.00	17.32	A
	ATOM	5794	CA	SER	A	736	16.019	77.265	-17.747	1.00	18.50	A
	ATOM	5795	CB	SER	A	736	15.387	78.427	-16.978	1.00	19.12	A
	ATOM	5796	OG	SER	A	736	14.401	77.959	-16.074	1.00	22.89	A
	ATOM	5797	C	SER	A	736	17.158	77.779	-18.622	1.00	19.11	A
15	ATOM	5798	O	SER	A	736	18.259	78.019	-18.134	1.00	18.19	A
	ATOM	5799	N	PRO	A	737	16.907	77.955	-19.928	1.00	19.88	A
	ATOM	5800	CD	PRO	A	737	15.659	77.671	-20.656	1.00	20.64	A
	ATOM	5801	CA	PRO	A	737	17.943	78.443	-20.845	1.00	20.87	A
	ATOM	5802	CB	PRO	A	737	17.215	78.502	-22.188	1.00	21.48	A
20	ATOM	5803	CG	PRO	A	737	16.162	77.441	-22.058	1.00	21.45	A
	ATOM	5804	C	PRO	A	737	18.504	79.803	-20.441	1.00	21.50	A
	ATOM	5805	O	PRO	A	737	17.764	80.685	-20.004	1.00	21.33	A
	ATOM	5806	N	VAL	A	738	19.816	79.966	-20.577	1.00	22.39	A
	ATOM	5807	CA	VAL	A	738	20.456	81.234	-20.254	1.00	23.03	A
25	ATOM	5808	CB	VAL	A	738	21.993	81.082	-20.119	1.00	22.73	A
	ATOM	5809	CG1	VAL	A	738	22.645	82.456	-19.993	1.00	22.43	A
	ATOM	5810	CG2	VAL	A	738	22.332	80.229	-18.903	1.00	21.84	A
	ATOM	5811	C	VAL	A	738	20.162	82.191	-21.407	1.00	24.47	A
	ATOM	5812	O	VAL	A	738	20.342	81.834	-22.570	1.00	24.12	A
30	ATOM	5813	N	GLU	A	739	19.692	83.392	-21.088	1.00	25.62	A
	ATOM	5814	CA	GLU	A	739	19.398	84.380	-22.121	1.00	26.93	A
	ATOM	5815	CB	GLU	A	739	18.604	85.546	-21.531	1.00	28.81	A
	ATOM	5816	CG	GLU	A	739	17.210	85.155	-21.066	1.00	32.07	A
	ATOM	5817	CD	GLU	A	739	16.327	84.675	-22.205	1.00	33.84	A
35	ATOM	5818	OE1	GLU	A	739	15.194	84.226	-21.932	1.00	35.19	A
	ATOM	5819	OE2	GLU	A	739	16.763	84.749	-23.374	1.00	34.81	A
	ATOM	5820	C	GLU	A	739	20.731	84.866	-22.671	1.00	26.25	A
	ATOM	5821	O	GLU	A	739	21.498	85.525	-21.971	1.00	25.93	A
	ATOM	5822	N	LEU	A	740	20.996	84.537	-23.931	1.00	26.09	A
40	ATOM	5823	CA	LEU	A	740	22.257	84.889	-24.574	1.00	25.99	A
	ATOM	5824	CB	LEU	A	740	22.631	83.803	-25.583	1.00	26.19	A
	ATOM	5825	CG	LEU	A	740	22.563	82.362	-25.073	1.00	25.97	A
	ATOM	5826	CD1	LEU	A	740	22.900	81.411	-26.208	1.00	25.89	A
	ATOM	5827	CD2	LEU	A	740	23.525	82.179	-23.905	1.00	26.08	A
45	ATOM	5828	C	LEU	A	740	22.304	86.240	-25.273	1.00	26.32	A
	ATOM	5829	O	LEU	A	740	23.384	86.795	-25.463	1.00	25.85	A
	ATOM	5830	N	GLY	A	741	21.146	86.767	-25.656	1.00	26.45	A
	ATOM	5831	CA	GLY	A	741	21.127	88.040	-26.353	1.00	26.72	A
	ATOM	5832	C	GLY	A	741	21.822	87.872	-27.692	1.00	26.42	A
50	ATOM	5833	O	GLY	A	741	21.597	86.883	-28.387	1.00	27.17	A
	ATOM	5834	N	GLN	A	742	22.666	88.831	-28.060	1.00	26.36	A
	ATOM	5835	CA	GLN	A	742	23.407	88.766	-29.318	1.00	25.57	A
	ATOM	5836	CB	GLN	A	742	23.036	89.953	-30.214	1.00	29.15	A
	ATOM	5837	CG	GLN	A	742	21.557	89.999	-30.588	1.00	33.16	A
55	ATOM	5838	CD	GLN	A	742	21.200	91.197	-31.449	1.00	35.56	A
	ATOM	5839	OE1	GLN	A	742	21.723	91.366	-32.551	1.00	37.11	A
	ATOM	5840	NE2	GLN	A	742	20.299	92.036	-30.948	1.00	36.79	A
	ATOM	5841	C	GLN	A	742	24.895	88.800	-28.977	1.00	23.07	A
	ATOM	5842	O	GLN	A	742	25.555	89.829	-29.113	1.00	22.79	A

5	ATOM	5843	N	PRO	A	743	25.444	87.660	-28.530	1.00	20.48	A
	ATOM	5844	CD	PRO	A	743	24.783	86.343	-28.449	1.00	19.61	A
	ATOM	5845	CA	PRO	A	743	26.857	87.558	-28.157	1.00	18.31	A
	ATOM	5846	CB	PRO	A	743	26.946	86.164	-27.544	1.00	18.28	A
	ATOM	5847	CG	PRO	A	743	25.961	85.390	-28.358	1.00	18.15	A
10	ATOM	5848	C	PRO	A	743	27.871	87.760	-29.277	1.00	16.88	A
	ATOM	5849	O	PRO	A	743	27.589	87.516	-30.449	1.00	16.70	A
	ATOM	5850	N	VAL	A	744	29.058	88.218	-28.893	1.00	14.74	A
	ATOM	5851	CA	VAL	A	744	30.139	88.437	-29.840	1.00	13.49	A
	ATOM	5852	CB	VAL	A	744	31.149	89.464	-29.296	1.00	12.90	A
15	ATOM	5853	CG1	VAL	A	744	32.284	89.655	-30.287	1.00	12.99	A
	ATOM	5854	CG2	VAL	A	744	30.442	90.789	-29.030	1.00	13.89	A
	ATOM	5855	C	VAL	A	744	30.842	87.105	-30.070	1.00	12.96	A
	ATOM	5856	O	VAL	A	744	31.183	86.401	-29.117	1.00	12.48	A
	ATOM	5857	N	VAL	A	745	31.041	86.763	-31.338	1.00	11.61	A
20	ATOM	5858	CA	VAL	A	745	31.687	85.514	-31.717	1.00	11.18	A
	ATOM	5859	CB	VAL	A	745	30.755	84.672	-32.615	1.00	10.82	A
	ATOM	5860	CG1	VAL	A	745	31.418	83.359	-32.981	1.00	11.01	A
	ATOM	5861	CG2	VAL	A	745	29.436	84.430	-31.904	1.00	10.80	A
	ATOM	5862	C	VAL	A	745	32.992	85.765	-32.463	1.00	11.19	A
25	ATOM	5863	O	VAL	A	745	33.041	86.564	-33.403	1.00	11.51	A
	ATOM	5864	N	LEU	A	746	34.047	85.077	-32.041	1.00	10.48	A
	ATOM	5865	CA	LEU	A	746	35.359	85.208	-32.662	1.00	10.17	A
	ATOM	5866	CB	LEU	A	746	36.409	85.575	-31.611	1.00	11.05	A
	ATOM	5867	CG	LEU	A	746	37.865	85.599	-32.087	1.00	11.54	A
30	ATOM	5868	CD1	LEU	A	746	38.050	86.671	-33.153	1.00	13.05	A
	ATOM	5869	CD2	LEU	A	746	38.779	85.863	-30.900	1.00	13.86	A
	ATOM	5870	C	LEU	A	746	35.761	83.908	-33.347	1.00	10.30	A
	ATOM	5871	O	LEU	A	746	35.820	82.847	-32.718	1.00	10.42	A
	ATOM	5872	N	VAL	A	747	36.044	83.992	-34.639	1.00	10.07	A
35	ATOM	5873	CA	VAL	A	747	36.435	82.824	-35.412	1.00	10.40	A
	ATOM	5874	CB	VAL	A	747	35.535	82.644	-36.658	1.00	10.85	A
	ATOM	5875	CG1	VAL	A	747	35.903	81.361	-37.385	1.00	10.29	A
	ATOM	5876	CG2	VAL	A	747	34.079	82.631	-36.248	1.00	10.45	A
	ATOM	5877	C	VAL	A	747	37.872	82.964	-35.878	1.00	11.25	A
40	ATOM	5878	O	VAL	A	747	38.214	83.908	-36.592	1.00	11.81	A
	ATOM	5879	N	THR	A	748	38.718	82.033	-35.458	1.00	10.82	A
	ATOM	5880	CA	THR	A	748	40.111	82.046	-35.866	1.00	12.00	A
	ATOM	5881	CB	THR	A	748	41.047	82.030	-34.646	1.00	12.71	A
	ATOM	5882	OG1	THR	A	748	40.806	83.201	-33.853	1.00	12.84	A
45	ATOM	5883	CG2	THR	A	748	42.502	82.010	-35.089	1.00	13.11	A
	ATOM	5884	C	THR	A	748	40.320	80.804	-36.715	1.00	12.53	A
	ATOM	5885	O	THR	A	748	40.056	79.689	-36.273	1.00	12.33	A
	ATOM	5886	N	LYS	A	749	40.768	81.004	-37.949	1.00	11.99	A
	ATOM	5887	CA	LYS	A	749	40.989	79.898	-38.868	1.00	12.97	A
50	ATOM	5888	CB	LYS	A	749	40.162	80.099	-40.140	1.00	14.41	A
	ATOM	5889	CG	LYS	A	749	40.361	79.009	-41.176	1.00	17.12	A
	ATOM	5890	CD	LYS	A	749	39.465	79.222	-42.384	1.00	19.62	A
	ATOM	5891	CE	LYS	A	749	39.708	78.154	-43.438	1.00	21.33	A
	ATOM	5892	NZ	LYS	A	749	38.867	78.377	-44.648	1.00	24.55	A
55	ATOM	5893	C	LYS	A	749	42.457	79.758	-39.230	1.00	12.94	A
	ATOM	5894	O	LYS	A	749	43.062	80.671	-39.797	1.00	12.59	A
	ATOM	5895	N	GLY	A	750	43.023	78.603	-38.903	1.00	12.38	A
	ATOM	5896	CA	GLY	A	750	44.420	78.351	-39.196	1.00	12.98	A
	ATOM	5897	C	GLY	A	750	44.621	76.977	-39.796	1.00	13.35	A

5	ATOM	5898	O	GLY	A	750	43.726	76.130	-39.752	1.00	14.37	A
	ATOM	5899	N	LYS	A	751	45.802	76.755	-40.362	1.00	13.85	A
	ATOM	5900	CA	LYS	A	751	46.122	75.474	-40.976	1.00	14.48	A
	ATOM	5901	CB	LYS	A	751	47.423	75.588	-41.774	1.00	17.11	A
	ATOM	5902	CG	LYS	A	751	47.355	76.562	-42.939	1.00	21.85	A
10	ATOM	5903	CD	LYS	A	751	46.358	76.094	-43.990	1.00	25.31	A
	ATOM	5904	CE	LYS	A	751	46.339	77.030	-45.190	1.00	26.61	A
	ATOM	5905	NZ	LYS	A	751	45.405	76.557	-46.249	1.00	28.25	A
	ATOM	5906	C	LYS	A	751	46.264	74.370	-39.933	1.00	13.47	A
	ATOM	5907	O	LYS	A	751	45.878	73.228	-40.174	1.00	13.67	A
15	ATOM	5908	N	LEU	A	752	46.812	74.718	-38.774	1.00	12.85	A
	ATOM	5909	CA	LEU	A	752	47.018	73.741	-37.711	1.00	12.63	A
	ATOM	5910	CB	LEU	A	752	48.386	73.957	-37.059	1.00	12.95	A
	ATOM	5911	CG	LEU	A	752	49.612	73.940	-37.976	1.00	13.92	A
	ATOM	5912	CD1	LEU	A	752	50.867	74.114	-37.137	1.00	14.66	A
20	ATOM	5913	CD2	LEU	A	752	49.663	72.635	-38.752	1.00	15.60	A
	ATOM	5914	C	LEU	A	752	45.947	73.781	-36.627	1.00	12.32	A
	ATOM	5915	O	LEU	A	752	45.616	72.756	-36.033	1.00	11.49	A
	ATOM	5916	N	GLU	A	753	45.403	74.964	-36.372	1.00	11.65	A
	ATOM	5917	CA	GLU	A	753	44.400	75.109	-35.332	1.00	11.90	A
25	ATOM	5918	CB	GLU	A	753	45.087	75.426	-34.000	1.00	12.47	A
	ATOM	5919	CG	GLU	A	753	44.140	75.575	-32.822	1.00	14.62	A
	ATOM	5920	CD	GLU	A	753	44.852	76.044	-31.567	1.00	16.59	A
	ATOM	5921	OE1	GLU	A	753	45.201	77.241	-31.489	1.00	19.53	A
	ATOM	5922	OE2	GLU	A	753	45.072	75.211	-30.664	1.00	19.34	A
30	ATOM	5923	C	GLU	A	753	43.399	76.207	-35.650	1.00	11.79	A
	ATOM	5924	O	GLU	A	753	43.776	77.308	-36.064	1.00	12.11	A
	ATOM	5925	N	SER	A	754	42.124	75.896	-35.453	1.00	10.70	A
	ATOM	5926	CA	SER	A	754	41.050	76.850	-35.675	1.00	10.81	A
	ATOM	5927	CB	SER	A	754	40.227	76.458	-36.901	1.00	11.07	A
35	ATOM	5928	OG	SER	A	754	40.988	76.604	-38.086	1.00	10.80	A
	ATOM	5929	C	SER	A	754	40.172	76.842	-34.436	1.00	10.66	A
	ATOM	5930	O	SER	A	754	40.221	75.902	-33.638	1.00	10.36	A
	ATOM	5931	N	SER	A	755	39.373	77.884	-34.258	1.00	10.33	A
	ATOM	5932	CA	SER	A	755	38.506	77.934	-33.097	1.00	11.56	A
40	ATOM	5933	CB	SER	A	755	39.317	78.274	-31.842	1.00	12.90	A
	ATOM	5934	OG	SER	A	755	39.816	79.597	-31.904	1.00	15.50	A
	ATOM	5935	C	SER	A	755	37.378	78.934	-33.233	1.00	10.74	A
	ATOM	5936	O	SER	A	755	37.442	79.877	-34.026	1.00	10.96	A
	ATOM	5937	N	VAL	A	756	36.335	78.701	-32.449	1.00	9.84	A
45	ATOM	5938	CA	VAL	A	756	35.177	79.574	-32.397	1.00	10.44	A
	ATOM	5939	CB	VAL	A	756	33.920	78.891	-32.961	1.00	10.20	A
	ATOM	5940	CG1	VAL	A	756	32.716	79.801	-32.774	1.00	10.96	A
	ATOM	5941	CG2	VAL	A	756	34.127	78.554	-34.432	1.00	12.18	A
	ATOM	5942	C	VAL	A	756	34.967	79.869	-30.919	1.00	10.58	A
50	ATOM	5943	O	VAL	A	756	34.764	78.953	-30.120	1.00	10.80	A
	ATOM	5944	N	SER	A	757	35.041	81.143	-30.552	1.00	10.27	A
	ATOM	5945	CA	SER	A	757	34.864	81.546	-29.164	1.00	10.99	A
	ATOM	5946	CB	SER	A	757	36.148	82.187	-28.631	1.00	11.96	A
	ATOM	5947	OG	SER	A	757	37.258	81.326	-28.808	1.00	14.85	A
55	ATOM	5948	C	SER	A	757	33.724	82.542	-29.062	1.00	10.89	A
	ATOM	5949	O	SER	A	757	33.579	83.411	-29.917	1.00	11.64	A
	ATOM	5950	N	VAL	A	758	32.918	82.423	-28.015	1.00	10.48	A
	ATOM	5951	CA	VAL	A	758	31.801	83.335	-27.827	1.00	11.21	A
	ATOM	5952	CB	VAL	A	758	30.471	82.678	-28.285	1.00	11.67	A

5	ATOM	5953	CG1	VAL	A	758	30.239	81.372	-27.535	1.00	12.22	A
	ATOM	5954	CG2	VAL	A	758	29.315	83.636	-28.067	1.00	11.35	A
	ATOM	5955	C	VAL	A	758	31.691	83.790	-26.376	1.00	11.49	A
	ATOM	5956	O	VAL	A	758	31.858	82.995	-25.446	1.00	11.17	A
	ATOM	5957	N	GLY	A	759	31.429	85.081	-26.196	1.00	11.26	A
10	ATOM	5958	CA	GLY	A	759	31.295	85.645	-24.867	1.00	11.72	A
	ATOM	5959	C	GLY	A	759	29.854	85.610	-24.396	1.00	11.97	A
	ATOM	5960	O	GLY	A	759	29.064	86.505	-24.696	1.00	12.26	A
	ATOM	5961	N	LEU	A	760	29.509	84.560	-23.661	1.00	12.65	A
	ATOM	5962	CA	LEU	A	760	28.160	84.388	-23.139	1.00	13.29	A
15	ATOM	5963	CB	LEU	A	760	27.776	82.905	-23.171	1.00	13.33	A
	ATOM	5964	CG	LEU	A	760	27.892	82.180	-24.513	1.00	13.38	A
	ATOM	5965	CD1	LEU	A	760	27.612	80.696	-24.316	1.00	15.19	A
	ATOM	5966	CD2	LEU	A	760	26.920	82.785	-25.518	1.00	14.79	A
	ATOM	5967	C	LEU	A	760	28.107	84.883	-21.701	1.00	13.87	A
20	ATOM	5968	O	LEU	A	760	29.143	85.085	-21.068	1.00	14.41	A
	ATOM	5969	N	PRO	A	761	26.897	85.102	-21.168	1.00	14.84	A
	ATOM	5970	CD	PRO	A	761	25.570	85.177	-21.802	1.00	15.39	A
	ATOM	5971	CA	PRO	A	761	26.844	85.569	-19.781	1.00	14.68	A
	ATOM	5972	CB	PRO	A	761	25.349	85.777	-19.544	1.00	15.73	A
25	ATOM	5973	CG	PRO	A	761	24.850	86.157	-20.905	1.00	15.81	A
	ATOM	5974	C	PRO	A	761	27.429	84.489	-18.867	1.00	14.74	A
	ATOM	5975	O	PRO	A	761	26.973	83.343	-18.879	1.00	15.36	A
	ATOM	5976	N	SER	A	762	28.451	84.864	-18.104	1.00	13.55	A
	ATOM	5977	CA	SER	A	762	29.122	83.967	-17.166	1.00	13.04	A
30	ATOM	5978	CB	SER	A	762	28.093	83.188	-16.337	1.00	13.70	A
	ATOM	5979	OG	SER	A	762	27.255	84.053	-15.597	1.00	15.66	A
	ATOM	5980	C	SER	A	762	30.080	82.961	-17.794	1.00	12.29	A
	ATOM	5981	O	SER	A	762	30.784	82.252	-17.074	1.00	11.93	A
	ATOM	5982	N	VAL	A	763	30.121	82.888	-19.120	1.00	12.24	A
35	ATOM	5983	CA	VAL	A	763	30.993	81.911	-19.760	1.00	11.70	A
	ATOM	5984	CB	VAL	A	763	30.250	80.563	-19.992	1.00	12.39	A
	ATOM	5985	CG1	VAL	A	763	31.211	79.528	-20.572	1.00	12.05	A
	ATOM	5986	CG2	VAL	A	763	29.642	80.057	-18.700	1.00	13.13	A
	ATOM	5987	C	VAL	A	763	31.566	82.298	-21.111	1.00	11.77	A
40	ATOM	5988	O	VAL	A	763	30.822	82.642	-22.021	1.00	11.80	A
	ATOM	5989	N	VAL	A	764	32.889	82.258	-21.237	1.00	10.33	A
	ATOM	5990	CA	VAL	A	764	33.497	82.488	-22.536	1.00	10.30	A
	ATOM	5991	CB	VAL	A	764	34.865	83.201	-22.449	1.00	10.08	A
	ATOM	5992	CG1	VAL	A	764	35.489	83.291	-23.844	1.00	11.18	A
45	ATOM	5993	CG2	VAL	A	764	34.684	84.601	-21.868	1.00	11.72	A
	ATOM	5994	C	VAL	A	764	33.675	81.038	-23.000	1.00	10.11	A
	ATOM	5995	O	VAL	A	764	34.513	80.296	-22.470	1.00	9.72	A
	ATOM	5996	N	HIS	A	765	32.843	80.638	-23.957	1.00	9.99	A
	ATOM	5997	CA	HIS	A	765	32.814	79.281	-24.502	1.00	9.87	A
50	ATOM	5998	CB	HIS	A	765	31.361	78.921	-24.825	1.00	9.62	A
	ATOM	5999	CG	HIS	A	765	31.172	77.533	-25.348	1.00	9.93	A
	ATOM	6000	CD2	HIS	A	765	31.366	76.329	-24.762	1.00	7.55	A
	ATOM	6001	ND1	HIS	A	765	30.686	77.271	-26.611	1.00	11.37	A
	ATOM	6002	CE1	HIS	A	765	30.586	75.965	-26.779	1.00	8.86	A
55	ATOM	6003	NE2	HIS	A	765	30.992	75.370	-25.671	1.00	11.67	A
	ATOM	6004	C	HIS	A	765	33.684	79.178	-25.750	1.00	10.43	A
	ATOM	6005	O	HIS	A	765	33.546	79.975	-26.674	1.00	9.54	A
	ATOM	6006	N	GLN	A	766	34.569	78.189	-25.787	1.00	9.10	A
	ATOM	6007	CA	GLN	A	766	35.473	78.041	-26.917	1.00	10.36	A

5	ATOM	6008	CB	GLN	A	766	36.886	78.461	-26.503	1.00	11.74	A
	ATOM	6009	CG	GLN	A	766	36.963	79.777	-25.740	1.00	16.65	A
	ATOM	6010	CD	GLN	A	766	38.093	79.787	-24.720	1.00	18.99	A
	ATOM	6011	OE1	GLN	A	766	39.248	79.518	-25.054	1.00	20.56	A
	ATOM	6012	NE2	GLN	A	766	37.761	80.098	-23.465	1.00	19.49	A
10	ATOM	6013	C	GLN	A	766	35.534	76.617	-27.450	1.00	9.67	A
	ATOM	6014	O	GLN	A	766	35.657	75.664	-26.679	1.00	9.31	A
	ATOM	6015	N	THR	A	767	35.447	76.481	-28.770	1.00	9.57	A
	ATOM	6016	CA	THR	A	767	35.537	75.184	-29.427	1.00	9.97	A
	ATOM	6017	CB	THR	A	767	34.326	74.909	-30.336	1.00	9.80	A
15	ATOM	6018	OG1	THR	A	767	33.124	74.986	-29.567	1.00	10.60	A
	ATOM	6019	CG2	THR	A	767	34.423	73.518	-30.943	1.00	10.52	A
	ATOM	6020	C	THR	A	767	36.797	75.248	-30.277	1.00	10.72	A
	ATOM	6021	O	THR	A	767	36.890	76.064	-31.201	1.00	10.96	A
	ATOM	6022	N	ILE	A	768	37.767	74.397	-29.955	1.00	10.84	A
20	ATOM	6023	CA	ILE	A	768	39.044	74.374	-30.659	1.00	11.39	A
	ATOM	6024	CB	ILE	A	768	40.207	74.474	-29.653	1.00	11.17	A
	ATOM	6025	CG2	ILE	A	768	41.536	74.614	-30.391	1.00	12.50	A
	ATOM	6026	CG1	ILE	A	768	39.986	75.679	-28.739	1.00	12.86	A
	ATOM	6027	CD1	ILE	A	768	40.930	75.727	-27.552	1.00	14.09	A
25	ATOM	6028	C	ILE	A	768	39.210	73.114	-31.499	1.00	11.59	A
	ATOM	6029	O	ILE	A	768	38.924	72.006	-31.044	1.00	11.70	A
	ATOM	6030	N	MSE	A	769	39.679	73.295	-32.729	1.00	11.90	A
	ATOM	6031	CA	MSE	A	769	39.878	72.190	-33.662	1.00	12.55	A
	ATOM	6032	CB	MSE	A	769	39.004	72.403	-34.898	1.00	15.34	A
30	ATOM	6033	CG	MSE	A	769	37.519	72.393	-34.597	1.00	16.83	A
	ATOM	6034	SE	MSE	A	769	36.503	73.347	-35.920	1.00	26.54	A
	ATOM	6035	CE	MSE	A	769	36.555	75.086	-35.079	1.00	19.56	A
	ATOM	6036	C	MSE	A	769	41.336	72.068	-34.088	1.00	12.98	A
	ATOM	6037	O	MSE	A	769	41.948	73.040	-34.531	1.00	12.06	A
35	ATOM	6038	N	ARG	A	770	41.891	70.868	-33.960	1.00	13.68	A
	ATOM	6039	CA	ARG	A	770	43.275	70.640	-34.339	1.00	15.07	A
	ATOM	6040	CB	ARG	A	770	44.140	70.474	-33.089	1.00	17.11	A
	ATOM	6041	CG	ARG	A	770	44.074	71.679	-32.165	1.00	20.18	A
	ATOM	6042	CD	ARG	A	770	44.923	71.491	-30.919	1.00	23.42	A
40	ATOM	6043	NE	ARG	A	770	44.600	72.493	-29.908	1.00	26.56	A
	ATOM	6044	CZ	ARG	A	770	45.160	72.556	-28.705	1.00	27.92	A
	ATOM	6045	NH1	ARG	A	770	46.084	71.671	-28.353	1.00	28.57	A
	ATOM	6046	NH2	ARG	A	770	44.790	73.500	-27.850	1.00	28.79	A
	ATOM	6047	C	ARG	A	770	43.435	69.434	-35.253	1.00	15.19	A
45	ATOM	6048	O	ARG	A	770	44.541	68.934	-35.442	1.00	15.98	A
	ATOM	6049	N	GLY	A	771	42.325	68.968	-35.814	1.00	15.00	A
	ATOM	6050	CA	GLY	A	771	42.390	67.836	-36.720	1.00	15.83	A
	ATOM	6051	C	GLY	A	771	41.638	66.602	-36.266	1.00	16.49	A
	ATOM	6052	O	GLY	A	771	41.371	65.706	-37.071	1.00	18.18	A
50	ATOM	6053	N	GLY	A	772	41.310	66.543	-34.979	1.00	15.66	A
	ATOM	6054	CA	GLY	A	772	40.581	65.404	-34.446	1.00	15.30	A
	ATOM	6055	C	GLY	A	772	39.374	65.872	-33.659	1.00	13.91	A
	ATOM	6056	O	GLY	A	772	38.767	66.886	-33.999	1.00	13.73	A
	ATOM	6057	N	ALA	A	773	39.012	65.135	-32.613	1.00	13.00	A
55	ATOM	6058	CA	ALA	A	773	37.877	65.525	-31.790	1.00	12.18	A
	ATOM	6059	CB	ALA	A	773	37.699	64.549	-30.642	1.00	12.99	A
	ATOM	6060	C	ALA	A	773	38.162	66.921	-31.249	1.00	11.57	A
	ATOM	6061	O	ALA	A	773	39.277	67.216	-30.819	1.00	12.06	A
	ATOM	6062	N	PRO	A	774	37.161	67.804	-31.273	1.00	11.20	A

5	ATOM	6063	CD	PRO	A	774	35.782	67.673	-31.775	1.00	11.31	A
	ATOM	6064	CA	PRO	A	774	37.409	69.152	-30.761	1.00	10.53	A
	ATOM	6065	CB	PRO	A	774	36.142	69.910	-31.153	1.00	11.51	A
	ATOM	6066	CG	PRO	A	774	35.089	68.847	-31.110	1.00	12.74	A
	ATOM	6067	C	PRO	A	774	37.660	69.219	-29.262	1.00	10.06	A
10	ATOM	6068	O	PRO	A	774	37.322	68.300	-28.507	1.00	9.96	A
	ATOM	6069	N	GLU	A	775	38.287	70.311	-28.849	1.00	9.33	A
	ATOM	6070	CA	GLU	A	775	38.550	70.565	-27.445	1.00	9.07	A
	ATOM	6071	CB	GLU	A	775	39.992	71.021	-27.213	1.00	9.95	A
	ATOM	6072	CG	GLU	A	775	40.302	71.305	-25.738	1.00	12.24	A
15	ATOM	6073	CD	GLU	A	775	41.714	71.809	-25.499	1.00	15.25	A
	ATOM	6074	OE1	GLU	A	775	42.609	71.504	-26.314	1.00	19.42	A
	ATOM	6075	OE2	GLU	A	775	41.934	72.497	-24.478	1.00	16.73	A
	ATOM	6076	C	GLU	A	775	37.608	71.701	-27.096	1.00	9.08	A
	ATOM	6077	O	GLU	A	775	37.431	72.632	-27.886	1.00	9.71	A
20	ATOM	6078	N	ILE	A	776	36.988	71.620	-25.931	1.00	9.14	A
	ATOM	6079	CA	ILE	A	776	36.083	72.666	-25.491	1.00	9.39	A
	ATOM	6080	CB	ILE	A	776	34.696	72.103	-25.114	1.00	10.30	A
	ATOM	6081	CG2	ILE	A	776	33.749	73.248	-24.785	1.00	11.43	A
	ATOM	6082	CG1	ILE	A	776	34.154	71.219	-26.240	1.00	12.19	A
25	ATOM	6083	CD1	ILE	A	776	34.033	71.908	-27.587	1.00	13.48	A
	ATOM	6084	C	ILE	A	776	36.683	73.295	-24.245	1.00	8.89	A
	ATOM	6085	O	ILE	A	776	37.173	72.585	-23.369	1.00	8.86	A
	ATOM	6086	N	ARG	A	777	36.670	74.622	-24.177	1.00	9.64	A
	ATOM	6087	CA	ARG	A	777	37.178	75.329	-23.007	1.00	9.16	A
30	ATOM	6088	CB	ARG	A	777	38.486	76.062	-23.306	1.00	10.34	A
	ATOM	6089	CG	ARG	A	777	39.647	75.161	-23.655	1.00	10.26	A
	ATOM	6090	CD	ARG	A	777	40.943	75.946	-23.759	1.00	11.46	A
	ATOM	6091	NE	ARG	A	777	42.013	75.116	-24.308	1.00	12.09	A
	ATOM	6092	CZ	ARG	A	777	43.198	75.575	-24.697	1.00	13.87	A
35	ATOM	6093	NH1	ARG	A	777	43.482	76.869	-24.593	1.00	15.34	A
	ATOM	6094	NH2	ARG	A	777	44.090	74.744	-25.221	1.00	15.77	A
	ATOM	6095	C	ARG	A	777	36.139	76.346	-22.589	1.00	8.98	A
	ATOM	6096	O	ARG	A	777	35.619	77.093	-23.423	1.00	9.21	A
	ATOM	6097	N	ASN	A	778	35.821	76.355	-21.303	1.00	8.45	A
40	ATOM	6098	CA	ASN	A	778	34.863	77.301	-20.756	1.00	8.73	A
	ATOM	6099	CB	ASN	A	778	33.672	76.597	-20.098	1.00	9.56	A
	ATOM	6100	CG	ASN	A	778	32.726	75.971	-21.094	1.00	10.18	A
	ATOM	6101	OD1	ASN	A	778	32.682	76.360	-22.261	1.00	10.34	A
	ATOM	6102	ND2	ASN	A	778	31.939	75.007	-20.629	1.00	9.32	A
45	ATOM	6103	C	ASN	A	778	35.529	78.141	-19.684	1.00	8.82	A
	ATOM	6104	O	ASN	A	778	36.000	77.600	-18.683	1.00	8.41	A
	ATOM	6105	N	LEU	A	779	35.586	79.453	-19.891	1.00	9.10	A
	ATOM	6106	CA	LEU	A	779	36.133	80.338	-18.868	1.00	9.56	A
	ATOM	6107	CB	LEU	A	779	36.792	81.574	-19.487	1.00	11.11	A
50	ATOM	6108	CG	LEU	A	779	37.363	82.583	-18.484	1.00	12.38	A
	ATOM	6109	CD1	LEU	A	779	38.443	81.931	-17.637	1.00	13.74	A
	ATOM	6110	CD2	LEU	A	779	37.924	83.779	-19.242	1.00	14.30	A
	ATOM	6111	C	LEU	A	779	34.869	80.723	-18.112	1.00	9.41	A
	ATOM	6112	O	LEU	A	779	34.092	81.567	-18.563	1.00	10.31	A
55	ATOM	6113	N	VAL	A	780	34.659	80.083	-16.969	1.00	8.89	A
	ATOM	6114	CA	VAL	A	780	33.457	80.297	-16.178	1.00	9.72	A
	ATOM	6115	CB	VAL	A	780	32.948	78.948	-15.610	1.00	9.29	A
	ATOM	6116	CG1	VAL	A	780	31.607	79.142	-14.917	1.00	10.76	A
	ATOM	6117	CG2	VAL	A	780	32.827	77.927	-16.735	1.00	9.53	A

5	ATOM	6118	C	VAL	A	780	33.607	81.290	-15.036	1.00	10.33	A
	ATOM	6119	O	VAL	A	780	34.404	81.090	-14.123	1.00	10.64	A
	ATOM	6120	N	ASP	A	781	32.832	82.368	-15.105	1.00	11.16	A
	ATOM	6121	CA	ASP	A	781	32.838	83.401	-14.076	1.00	11.93	A
	ATOM	6122	CB	ASP	A	781	33.522	84.670	-14.583	1.00	14.09	A
10	ATOM	6123	CG	ASP	A	781	33.596	85.750	-13.522	1.00	15.28	A
	ATOM	6124	OD1	ASP	A	781	34.106	86.850	-13.823	1.00	18.04	A
	ATOM	6125	OD2	ASP	A	781	33.146	85.499	-12.384	1.00	15.28	A
	ATOM	6126	C	ASP	A	781	31.384	83.693	-13.748	1.00	12.36	A
	ATOM	6127	O	ASP	A	781	30.751	84.548	-14.372	1.00	11.82	A
15	ATOM	6128	N	ILE	A	782	30.861	82.962	-12.770	1.00	13.05	A
	ATOM	6129	CA	ILE	A	782	29.474	83.088	-12.348	1.00	15.17	A
	ATOM	6130	CB	ILE	A	782	29.110	81.918	-11.399	1.00	15.24	A
	ATOM	6131	CG2	ILE	A	782	29.747	82.136	-10.032	1.00	15.58	A
	ATOM	6132	CG1	ILE	A	782	27.595	81.776	-11.289	1.00	15.55	A
20	ATOM	6133	CD1	ILE	A	782	27.163	80.458	-10.671	1.00	15.33	A
	ATOM	6134	C	ILE	A	782	29.202	84.437	-11.680	1.00	16.86	A
	ATOM	6135	O	ILE	A	782	28.061	84.759	-11.341	1.00	18.15	A
	ATOM	6136	N	GLY	A	783	30.260	85.224	-11.503	1.00	17.28	A
	ATOM	6137	CA	GLY	A	783	30.126	86.545	-10.908	1.00	19.48	A
25	ATOM	6138	C	GLY	A	783	29.290	86.621	-9.646	1.00	20.51	A
	ATOM	6139	O	GLY	A	783	29.538	85.895	-8.682	1.00	21.41	A
	ATOM	6140	N	SER	A	784	28.293	87.503	-9.649	1.00	22.21	A
	ATOM	6141	CA	SER	A	784	27.435	87.675	-8.483	1.00	23.63	A
	ATOM	6142	CB	SER	A	784	27.325	89.160	-8.128	1.00	24.57	A
30	ATOM	6143	OG	SER	A	784	26.727	89.896	-9.180	1.00	26.76	A
	ATOM	6144	C	SER	A	784	26.035	87.086	-8.649	1.00	24.17	A
	ATOM	6145	O	SER	A	784	25.109	87.470	-7.934	1.00	24.52	A
	ATOM	6146	N	LEU	A	785	25.880	86.158	-9.589	1.00	24.17	A
	ATOM	6147	CA	LEU	A	785	24.585	85.520	-9.819	1.00	24.30	A
35	ATOM	6148	CB	LEU	A	785	24.589	84.756	-11.147	1.00	25.03	A
	ATOM	6149	CG	LEU	A	785	24.586	85.570	-12.444	1.00	26.37	A
	ATOM	6150	CD1	LEU	A	785	25.792	86.490	-12.492	1.00	27.91	A
	ATOM	6151	CD2	LEU	A	785	24.597	84.623	-13.631	1.00	27.18	A
	ATOM	6152	C	LEU	A	785	24.282	84.554	-8.678	1.00	24.04	A
40	ATOM	6153	O	LEU	A	785	24.590	83.364	-8.760	1.00	24.23	A
	ATOM	6154	N	ASP	A	786	23.666	85.068	-7.620	1.00	23.21	A
	ATOM	6155	CA	ASP	A	786	23.345	84.247	-6.460	1.00	22.19	A
	ATOM	6156	CB	ASP	A	786	22.877	85.130	-5.302	1.00	24.01	A
	ATOM	6157	CG	ASP	A	786	23.851	86.245	-4.993	1.00	25.65	A
45	ATOM	6158	OD1	ASP	A	786	25.048	85.955	-4.776	1.00	24.91	A
	ATOM	6159	OD2	ASP	A	786	23.418	87.417	-4.968	1.00	26.93	A
	ATOM	6160	C	ASP	A	786	22.289	83.188	-6.747	1.00	20.42	A
	ATOM	6161	O	ASP	A	786	21.423	83.368	-7.604	1.00	20.14	A
	ATOM	6162	N	ASN	A	787	22.378	82.085	-6.012	1.00	18.59	A
50	ATOM	6163	CA	ASN	A	787	21.450	80.971	-6.145	1.00	17.29	A
	ATOM	6164	CB	ASN	A	787	20.104	81.341	-5.522	1.00	18.36	A
	ATOM	6165	CG	ASN	A	787	20.230	81.678	-4.054	1.00	19.72	A
	ATOM	6166	OD1	ASN	A	787	20.851	80.936	-3.292	1.00	20.47	A
	ATOM	6167	ND2	ASN	A	787	19.644	82.799	-3.646	1.00	22.13	A
55	ATOM	6168	C	ASN	A	787	21.267	80.536	-7.590	1.00	16.22	A
	ATOM	6169	O	ASN	A	787	20.145	80.387	-8.077	1.00	15.49	A
	ATOM	6170	N	THR	A	788	22.389	80.321	-8.266	1.00	14.90	A
	ATOM	6171	CA	THR	A	788	22.382	79.901	-9.656	1.00	13.74	A
	ATOM	6172	CB	THR	A	788	22.718	81.081	-10.594	1.00	15.15	A

5	ATOM	6173	OG1	THR	A	788	21.782	82.145	-10.380	1.00	15.54	A
	ATOM	6174	CG2	THR	A	788	22.649	80.646	-12.053	1.00	14.91	A
	ATOM	6175	C	THR	A	788	23.427	78.817	-9.874	1.00	12.17	A
	ATOM	6176	O	THR	A	788	24.516	78.872	-9.306	1.00	12.24	A
	ATOM	6177	N	GLU	A	789	23.075	77.823	-10.679	1.00	11.16	A
10	ATOM	6178	CA	GLU	A	789	23.993	76.750	-11.021	1.00	10.70	A
	ATOM	6179	CB	GLU	A	789	23.523	75.417	-10.417	1.00	10.65	A
	ATOM	6180	CG	GLU	A	789	23.410	75.468	-8.893	1.00	11.01	A
	ATOM	6181	CD	GLU	A	789	23.467	74.103	-8.230	1.00	10.75	A
	ATOM	6182	OE1	GLU	A	789	24.244	73.242	-8.700	1.00	11.43	A
15	ATOM	6183	OE2	GLU	A	789	22.751	73.900	-7.224	1.00	11.36	A
	ATOM	6184	C	GLU	A	789	23.977	76.717	-12.545	1.00	10.53	A
	ATOM	6185	O	GLU	A	789	22.925	76.541	-13.159	1.00	12.21	A
	ATOM	6186	N	ILE	A	790	25.141	76.929	-13.151	1.00	9.89	A
	ATOM	6187	CA	ILE	A	790	25.258	76.951	-14.603	1.00	11.05	A
20	ATOM	6188	CB	ILE	A	790	26.356	77.928	-15.063	1.00	11.53	A
	ATOM	6189	CG2	ILE	A	790	26.444	77.932	-16.584	1.00	11.91	A
	ATOM	6190	CG1	ILE	A	790	26.048	79.335	-14.545	1.00	14.02	A
	ATOM	6191	CD1	ILE	A	790	27.164	80.331	-14.786	1.00	16.91	A
	ATOM	6192	C	ILE	A	790	25.601	75.577	-15.143	1.00	10.36	A
25	ATOM	6193	O	ILE	A	790	26.590	74.967	-14.735	1.00	10.51	A
	ATOM	6194	N	VAL	A	791	24.783	75.096	-16.070	1.00	10.03	A
	ATOM	6195	CA	VAL	A	791	25.003	73.790	-16.664	1.00	10.13	A
	ATOM	6196	CB	VAL	A	791	23.792	72.848	-16.409	1.00	10.46	A
	ATOM	6197	CG1	VAL	A	791	22.582	73.304	-17.224	1.00	11.49	A
30	ATOM	6198	CG2	VAL	A	791	24.163	71.414	-16.760	1.00	11.24	A
	ATOM	6199	C	VAL	A	791	25.239	73.873	-18.166	1.00	9.93	A
	ATOM	6200	O	VAL	A	791	24.653	74.714	-18.860	1.00	10.16	A
	ATOM	6201	N	MSE	A	792	26.128	73.022	-18.662	1.00	9.51	A
	ATOM	6202	CA	MSE	A	792	26.394	72.954	-20.092	1.00	9.67	A
35	ATOM	6203	CB	MSE	A	792	27.892	72.921	-20.392	1.00	11.43	A
	ATOM	6204	CG	MSE	A	792	28.185	72.769	-21.881	1.00	12.60	A
	ATOM	6205	SE	MSE	A	792	30.059	72.856	-22.319	1.00	18.80	A
	ATOM	6206	CE	MSE	A	792	30.632	71.215	-21.499	1.00	14.20	A
	ATOM	6207	C	MSE	A	792	25.749	71.657	-20.559	1.00	9.89	A
40	ATOM	6208	O	MSE	A	792	26.063	70.581	-20.046	1.00	10.12	A
	ATOM	6209	N	ARG	A	793	24.843	71.760	-21.524	1.00	9.88	A
	ATOM	6210	CA	ARG	A	793	24.143	70.589	-22.027	1.00	9.40	A
	ATOM	6211	CB	ARG	A	793	22.636	70.756	-21.786	1.00	9.08	A
	ATOM	6212	CG	ARG	A	793	21.775	69.579	-22.249	1.00	9.24	A
45	ATOM	6213	CD	ARG	A	793	20.300	69.824	-21.940	1.00	10.28	A
	ATOM	6214	NE	ARG	A	793	20.051	69.905	-20.504	1.00	11.04	A
	ATOM	6215	CZ	ARG	A	793	18.958	70.427	-19.959	1.00	10.72	A
	ATOM	6216	NH1	ARG	A	793	17.995	70.922	-20.733	1.00	12.36	A
	ATOM	6217	NH2	ARG	A	793	18.832	70.473	-18.640	1.00	11.35	A
50	ATOM	6218	C	ARG	A	793	24.396	70.333	-23.503	1.00	9.92	A
	ATOM	6219	O	ARG	A	793	24.593	71.264	-24.286	1.00	10.28	A
	ATOM	6220	N	LEU	A	794	24.393	69.055	-23.866	1.00	10.51	A
	ATOM	6221	CA	LEU	A	794	24.563	68.618	-25.248	1.00	10.31	A
	ATOM	6222	CB	LEU	A	794	25.730	67.633	-25.370	1.00	11.42	A
55	ATOM	6223	CG	LEU	A	794	27.129	68.240	-25.492	1.00	11.51	A
	ATOM	6224	CD1	LEU	A	794	28.180	67.207	-25.131	1.00	12.30	A
	ATOM	6225	CD2	LEU	A	794	27.336	68.748	-26.914	1.00	13.24	A
	ATOM	6226	C	LEU	A	794	23.265	67.921	-25.643	1.00	11.62	A
	ATOM	6227	O	LEU	A	794	22.789	67.038	-24.931	1.00	10.91	A

5	ATOM	6228	N	GLU	A	795	22.686	68.330	-26.766	1.00	11.83	A
	ATOM	6229	CA	GLU	A	795	21.444	67.731	-27.244	1.00	13.21	A
	ATOM	6230	CB	GLU	A	795	20.373	68.814	-27.427	1.00	13.79	A
	ATOM	6231	CG	GLU	A	795	20.156	69.665	-26.184	1.00	16.95	A
	ATOM	6232	CD	GLU	A	795	19.134	70.774	-26.382	1.00	18.99	A
10	ATOM	6233	OE1	GLU	A	795	19.138	71.404	-27.460	1.00	21.87	A
	ATOM	6234	OE2	GLU	A	795	18.339	71.029	-25.452	1.00	20.56	A
	ATOM	6235	C	GLU	A	795	21.716	67.018	-28.565	1.00	13.30	A
	ATOM	6236	O	GLU	A	795	22.259	67.609	-29.500	1.00	13.97	A
	ATOM	6237	N	THR	A	796	21.352	65.741	-28.637	1.00	12.67	A
15	ATOM	6238	CA	THR	A	796	21.577	64.957	-29.846	1.00	13.15	A
	ATOM	6239	CB	THR	A	796	22.771	63.991	-29.688	1.00	12.88	A
	ATOM	6240	OG1	THR	A	796	22.372	62.859	-28.900	1.00	11.73	A
	ATOM	6241	CG2	THR	A	796	23.935	64.687	-29.002	1.00	13.25	A
	ATOM	6242	C	THR	A	796	20.369	64.101	-30.203	1.00	13.86	A
20	ATOM	6243	O	THR	A	796	19.355	64.120	-29.509	1.00	16.03	A
	ATOM	6244	N	HIS	A	797	20.511	63.341	-31.284	1.00	15.53	A
	ATOM	6245	CA	HIS	A	797	19.465	62.444	-31.764	1.00	16.70	A
	ATOM	6246	CB	HIS	A	797	19.343	62.542	-33.283	1.00	18.40	A
	ATOM	6247	CG	HIS	A	797	18.639	63.775	-33.747	1.00	18.87	A
25	ATOM	6248	CD2	HIS	A	797	17.877	64.669	-33.075	1.00	18.85	A
	ATOM	6249	ND1	HIS	A	797	18.669	64.204	-35.056	1.00	19.59	A
	ATOM	6250	CE1	HIS	A	797	17.956	65.310	-35.169	1.00	19.23	A
	ATOM	6251	NE2	HIS	A	797	17.465	65.613	-33.981	1.00	18.80	A
	ATOM	6252	C	HIS	A	797	19.762	61.006	-31.381	1.00	17.12	A
30	ATOM	6253	O	HIS	A	797	19.058	60.087	-31.799	1.00	18.02	A
	ATOM	6254	N	ILE	A	798	20.814	60.809	-30.595	1.00	15.17	A
	ATOM	6255	CA	ILE	A	798	21.190	59.473	-30.158	1.00	14.07	A
	ATOM	6256	CB	ILE	A	798	22.492	59.525	-29.330	1.00	13.19	A
	ATOM	6257	CG2	ILE	A	798	22.845	58.132	-28.802	1.00	12.33	A
35	ATOM	6258	CG1	ILE	A	798	23.623	60.070	-30.207	1.00	13.23	A
	ATOM	6259	CD1	ILE	A	798	24.934	60.303	-29.468	1.00	13.56	A
	ATOM	6260	C	ILE	A	798	20.047	58.887	-29.331	1.00	13.73	A
	ATOM	6261	O	ILE	A	798	19.554	59.518	-28.399	1.00	13.69	A
	ATOM	6262	N	ASP	A	799	19.617	57.681	-29.697	1.00	14.35	A
40	ATOM	6263	CA	ASP	A	799	18.519	57.009	-29.013	1.00	14.00	A
	ATOM	6264	CB	ASP	A	799	17.849	56.018	-29.970	1.00	15.90	A
	ATOM	6265	CG	ASP	A	799	16.539	55.485	-29.436	1.00	17.22	A
	ATOM	6266	OD1	ASP	A	799	16.007	54.522	-30.025	1.00	18.99	A
	ATOM	6267	OD2	ASP	A	799	16.036	56.028	-28.434	1.00	19.56	A
45	ATOM	6268	C	ASP	A	799	19.031	56.270	-27.780	1.00	13.90	A
	ATOM	6269	O	ASP	A	799	18.965	55.045	-27.701	1.00	13.45	A
	ATOM	6270	N	SER	A	800	19.529	57.031	-26.812	1.00	13.23	A
	ATOM	6271	CA	SER	A	800	20.077	56.462	-25.587	1.00	12.57	A
	ATOM	6272	CB	SER	A	800	21.039	57.466	-24.943	1.00	12.35	A
50	ATOM	6273	OG	SER	A	800	20.372	58.671	-24.618	1.00	11.94	A
	ATOM	6274	C	SER	A	800	19.021	56.038	-24.570	1.00	11.90	A
	ATOM	6275	O	SER	A	800	19.303	55.237	-23.679	1.00	11.76	A
	ATOM	6276	N	GLY	A	801	17.812	56.576	-24.694	1.00	11.77	A
	ATOM	6277	CA	GLY	A	801	16.751	56.225	-23.766	1.00	11.64	A
55	ATOM	6278	C	GLY	A	801	16.994	56.750	-22.367	1.00	11.57	A
	ATOM	6279	O	GLY	A	801	17.063	57.956	-22.157	1.00	12.52	A
	ATOM	6280	N	ASP	A	802	17.118	55.840	-21.406	1.00	11.43	A
	ATOM	6281	CA	ASP	A	802	17.358	56.225	-20.021	1.00	11.22	A
	ATOM	6282	CB	ASP	A	802	16.274	55.636	-19.107	1.00	13.10	A

5	ATOM	6283	CG	ASP	A	802	16.173	54.118	-19.201	1.00	13.45	A
	ATOM	6284	OD1	ASP	A	802	15.264	53.554	-18.553	1.00	15.07	A
	ATOM	6285	OD2	ASP	A	802	16.990	53.486	-19.908	1.00	15.03	A
	ATOM	6286	C	ASP	A	802	18.736	55.771	-19.556	1.00	10.91	A
	ATOM	6287	O	ASP	A	802	19.041	55.807	-18.362	1.00	10.76	A
	ATOM	6288	N	ILE	A	803	19.571	55.370	-20.507	1.00	9.82	A
	ATOM	6289	CA	ILE	A	803	20.910	54.888	-20.197	1.00	9.93	A
	ATOM	6290	CB	ILE	A	803	21.208	53.572	-20.958	1.00	9.82	A
	ATOM	6291	CG2	ILE	A	803	22.634	53.103	-20.670	1.00	9.69	A
	ATOM	6292	CG1	ILE	A	803	20.191	52.496	-20.564	1.00	9.60	A
10	ATOM	6293	CD1	ILE	A	803	20.226	52.125	-19.093	1.00	10.76	A
	ATOM	6294	C	ILE	A	803	22.020	55.872	-20.537	1.00	9.64	A
	ATOM	6295	O	ILE	A	803	21.969	56.562	-21.556	1.00	9.87	A
	ATOM	6296	N	PHE	A	804	23.020	55.940	-19.662	1.00	9.22	A
15	ATOM	6297	CA	PHE	A	804	24.188	56.776	-19.889	1.00	8.73	A
	ATOM	6298	CB	PHE	A	804	23.913	58.265	-19.583	1.00	8.57	A
	ATOM	6299	CG	PHE	A	804	23.561	58.572	-18.151	1.00	8.50	A
	ATOM	6300	CD1	PHE	A	804	24.496	59.178	-17.311	1.00	8.09	A
20	ATOM	6301	CD2	PHE	A	804	22.272	58.351	-17.667	1.00	8.51	A
	ATOM	6302	CE1	PHE	A	804	24.152	59.568	-16.016	1.00	8.03	A
	ATOM	6303	CE2	PHE	A	804	21.917	58.738	-16.370	1.00	9.55	A
	ATOM	6304	CZ	PHE	A	804	22.862	59.351	-15.546	1.00	9.47	A
25	ATOM	6305	C	PHE	A	804	25.324	56.208	-19.059	1.00	8.03	A
	ATOM	6306	O	PHE	A	804	25.100	55.363	-18.192	1.00	8.86	A
	ATOM	6307	N	TYR	A	805	26.543	56.636	-19.346	1.00	7.73	A
	ATOM	6308	CA	TYR	A	805	27.696	56.117	-18.635	1.00	7.16	A
30	ATOM	6309	CB	TYR	A	805	28.558	55.279	-19.582	1.00	7.36	A
	ATOM	6310	CG	TYR	A	805	27.858	54.059	-20.133	1.00	8.65	A
	ATOM	6311	CD1	TYR	A	805	26.873	54.174	-21.117	1.00	9.16	A
	ATOM	6312	CE1	TYR	A	805	26.232	53.047	-21.626	1.00	8.73	A
35	ATOM	6313	CD2	TYR	A	805	28.184	52.786	-19.669	1.00	8.73	A
	ATOM	6314	CE2	TYR	A	805	27.547	51.651	-20.171	1.00	9.56	A
	ATOM	6315	CZ	TYR	A	805	26.576	51.792	-21.149	1.00	10.03	A
	ATOM	6316	OH	TYR	A	805	25.956	50.674	-21.664	1.00	10.71	A
40	ATOM	6317	C	TYR	A	805	28.536	57.232	-18.052	1.00	7.37	A
	ATOM	6318	O	TYR	A	805	28.700	58.275	-18.675	1.00	8.06	A
	ATOM	6319	N	THR	A	806	29.046	57.011	-16.844	1.00	7.62	A
	ATOM	6320	CA	THR	A	806	29.908	57.985	-16.187	1.00	7.14	A
45	ATOM	6321	CB	THR	A	806	29.179	58.741	-15.060	1.00	7.06	A
	ATOM	6322	OG1	THR	A	806	28.822	57.829	-14.016	1.00	8.45	A
	ATOM	6323	CG2	THR	A	806	27.922	59.398	-15.586	1.00	7.42	A
	ATOM	6324	C	THR	A	806	31.062	57.188	-15.599	1.00	7.29	A
50	ATOM	6325	O	THR	A	806	30.936	55.986	-15.368	1.00	7.37	A
	ATOM	6326	N	ASP	A	807	32.195	57.834	-15.366	1.00	7.07	A
	ATOM	6327	CA	ASP	A	807	33.319	57.096	-14.820	1.00	7.59	A
	ATOM	6328	CB	ASP	A	807	34.632	57.567	-15.444	1.00	8.85	A
55	ATOM	6329	CG	ASP	A	807	35.082	58.908	-14.912	1.00	9.02	A
	ATOM	6330	OD1	ASP	A	807	36.215	58.983	-14.389	1.00	10.87	A
	ATOM	6331	OD2	ASP	A	807	34.310	59.883	-15.013	1.00	9.58	A
	ATOM	6332	C	ASP	A	807	33.418	57.207	-13.313	1.00	7.31	A
	ATOM	6333	O	ASP	A	807	32.801	58.069	-12.686	1.00	7.29	A
	ATOM	6334	N	LEU	A	808	34.193	56.299	-12.742	1.00	7.26	A
	ATOM	6335	CA	LEU	A	808	34.435	56.291	-11.315	1.00	6.64	A
	ATOM	6336	CB	LEU	A	808	33.996	54.960	-10.697	1.00	7.52	A
	ATOM	6337	CG	LEU	A	808	32.480	54.762	-10.576	1.00	7.74	A

5	ATOM	6338	CD1	LEU	A	808	32.171	53.301	-10.300	1.00	9.05	A
	ATOM	6339	CD2	LEU	A	808	31.927	55.646	-9.466	1.00	8.74	A
	ATOM	6340	C	LEU	A	808	35.931	56.493	-11.120	1.00	7.13	A
	ATOM	6341	O	LEU	A	808	36.740	55.662	-11.537	1.00	6.82	A
	ATOM	6342	N	ASN	A	809	36.284	57.635	-10.536	1.00	6.18	A
	ATOM	6343	CA	ASN	A	809	37.671	57.976	-10.229	1.00	6.39	A
	ATOM	6344	CB	ASN	A	809	38.141	57.084	-9.077	1.00	5.55	A
	ATOM	6345	CG	ASN	A	809	37.154	57.061	-7.935	1.00	6.45	A
	ATOM	6346	OD1	ASN	A	809	37.176	57.931	-7.051	1.00	8.57	A
	ATOM	6347	ND2	ASN	A	809	36.259	56.083	-7.957	1.00	4.53	A
10	ATOM	6348	C	ASN	A	809	38.643	57.871	-11.401	1.00	6.62	A
	ATOM	6349	O	ASN	A	809	39.830	57.619	-11.202	1.00	6.76	A
	ATOM	6350	N	GLY	A	810	38.144	58.072	-12.618	1.00	6.22	A
	ATOM	6351	CA	GLY	A	810	38.998	57.994	-13.795	1.00	7.72	A
15	ATOM	6352	C	GLY	A	810	39.568	56.606	-14.038	1.00	8.56	A
	ATOM	6353	O	GLY	A	810	40.536	56.437	-14.788	1.00	9.54	A
	ATOM	6354	N	LEU	A	811	38.950	55.606	-13.420	1.00	7.78	A
	ATOM	6355	CA	LEU	A	811	39.410	54.225	-13.532	1.00	8.21	A
20	ATOM	6356	CB	LEU	A	811	39.541	53.622	-12.127	1.00	8.72	A
	ATOM	6357	CG	LEU	A	811	39.955	52.154	-12.012	1.00	10.15	A
	ATOM	6358	CD1	LEU	A	811	41.366	51.988	-12.539	1.00	11.19	A
	ATOM	6359	CD2	LEU	A	811	39.874	51.707	-10.559	1.00	10.32	A
25	ATOM	6360	C	LEU	A	811	38.520	53.312	-14.370	1.00	9.02	A
	ATOM	6361	O	LEU	A	811	39.015	52.459	-15.108	1.00	10.92	A
	ATOM	6362	N	GLN	A	812	37.212	53.501	-14.262	1.00	8.03	A
	ATOM	6363	CA	GLN	A	812	36.264	52.644	-14.962	1.00	8.29	A
30	ATOM	6364	CB	GLN	A	812	35.907	51.464	-14.056	1.00	9.25	A
	ATOM	6365	CG	GLN	A	812	35.335	51.928	-12.710	1.00	10.20	A
	ATOM	6366	CD	GLN	A	812	35.023	50.790	-11.756	1.00	12.79	A
	ATOM	6367	OE1	GLN	A	812	34.052	50.058	-11.938	1.00	13.30	A
35	ATOM	6368	NE2	GLN	A	812	35.851	50.640	-10.727	1.00	13.55	A
	ATOM	6369	C	GLN	A	812	34.992	53.398	-15.298	1.00	8.35	A
	ATOM	6370	O	GLN	A	812	34.680	54.415	-14.671	1.00	7.86	A
	ATOM	6371	N	PHE	A	813	34.260	52.903	-16.291	1.00	7.68	A
40	ATOM	6372	CA	PHE	A	813	32.993	53.515	-16.656	1.00	7.67	A
	ATOM	6373	CB	PHE	A	813	32.926	53.810	-18.155	1.00	7.05	A
	ATOM	6374	CG	PHE	A	813	33.686	55.041	-18.546	1.00	7.39	A
	ATOM	6375	CD1	PHE	A	813	35.072	55.012	-18.646	1.00	7.39	A
45	ATOM	6376	CD2	PHE	A	813	33.019	56.247	-18.741	1.00	8.36	A
	ATOM	6377	CE1	PHE	A	813	35.788	56.170	-18.932	1.00	9.02	A
	ATOM	6378	CE2	PHE	A	813	33.725	57.410	-19.027	1.00	8.21	A
	ATOM	6379	CZ	PHE	A	813	35.115	57.368	-19.121	1.00	8.05	A
50	ATOM	6380	C	PHE	A	813	31.876	52.583	-16.240	1.00	7.95	A
	ATOM	6381	O	PHE	A	813	31.884	51.387	-16.561	1.00	8.99	A
	ATOM	6382	N	ILE	A	814	30.921	53.140	-15.509	1.00	7.80	A
	ATOM	6383	CA	ILE	A	814	29.799	52.379	-14.990	1.00	8.05	A
55	ATOM	6384	CB	ILE	A	814	29.720	52.552	-13.450	1.00	7.86	A
	ATOM	6385	CG2	ILE	A	814	29.397	53.998	-13.102	1.00	8.17	A
	ATOM	6386	CG1	ILE	A	814	28.668	51.616	-12.851	1.00	8.21	A
	ATOM	6387	CD1	ILE	A	814	28.763	51.486	-11.329	1.00	8.23	A
	ATOM	6388	C	ILE	A	814	28.490	52.812	-15.646	1.00	7.18	A
	ATOM	6389	O	ILE	A	814	28.262	53.997	-15.900	1.00	6.96	A
	ATOM	6390	N	LYS	A	815	27.641	51.834	-15.933	1.00	7.64	A
	ATOM	6391	CA	LYS	A	815	26.355	52.097	-16.557	1.00	8.17	A
	ATOM	6392	CB	LYS	A	815	25.764	50.787	-17.078	1.00	9.06	A
	ATOM	6392	CB	LYS	A	815	25.764	50.787	-17.078	1.00	9.06	A

5	ATOM	6393	CG	LYS	A	815	24.457	50.909	-17.845	1.00	11.44	A
	ATOM	6394	CD	LYS	A	815	24.060	49.539	-18.389	1.00	13.34	A
	ATOM	6395	CE	LYS	A	815	22.850	49.609	-19.297	1.00	16.25	A
	ATOM	6396	NZ	LYS	A	815	22.538	48.269	-19.879	1.00	18.48	A
	ATOM	6397	C	LYS	A	815	25.392	52.744	-15.572	1.00	7.90	A
10	ATOM	6398	O	LYS	A	815	25.240	52.288	-14.437	1.00	7.72	A
	ATOM	6399	N	ARG	A	816	24.752	53.817	-16.016	1.00	7.58	A
	ATOM	6400	CA	ARG	A	816	23.779	54.533	-15.205	1.00	7.54	A
	ATOM	6401	CB	ARG	A	816	24.133	56.023	-15.103	1.00	8.01	A
	ATOM	6402	CG	ARG	A	816	25.524	56.341	-14.580	1.00	8.73	A
15	ATOM	6403	CD	ARG	A	816	25.718	55.751	-13.203	1.00	9.16	A
	ATOM	6404	NE	ARG	A	816	26.879	56.317	-12.522	1.00	8.38	A
	ATOM	6405	CZ	ARG	A	816	27.259	55.952	-11.304	1.00	8.64	A
	ATOM	6406	NH1	ARG	A	816	26.567	55.027	-10.654	1.00	7.99	A
	ATOM	6407	NH2	ARG	A	816	28.311	56.519	-10.728	1.00	8.64	A
20	ATOM	6408	C	ARG	A	816	22.419	54.436	-15.874	1.00	8.06	A
	ATOM	6409	O	ARG	A	816	22.327	54.376	-17.099	1.00	7.94	A
	ATOM	6410	N	ARG	A	817	21.366	54.419	-15.066	1.00	8.58	A
	ATOM	6411	CA	ARG	A	817	20.016	54.403	-15.606	1.00	9.41	A
	ATOM	6412	CB	ARG	A	817	19.302	53.073	-15.330	1.00	9.62	A
25	ATOM	6413	CG	ARG	A	817	17.830	53.098	-15.749	1.00	11.25	A
	ATOM	6414	CD	ARG	A	817	17.123	51.758	-15.571	1.00	13.10	A
	ATOM	6415	NE	ARG	A	817	17.649	50.728	-16.460	1.00	13.49	A
	ATOM	6416	CZ	ARG	A	817	18.408	49.713	-16.062	1.00	14.00	A
	ATOM	6417	NH1	ARG	A	817	18.736	49.588	-14.781	1.00	13.99	A
30	ATOM	6418	NH2	ARG	A	817	18.838	48.820	-16.942	1.00	15.05	A
	ATOM	6419	C	ARG	A	817	19.249	55.539	-14.953	1.00	9.86	A
	ATOM	6420	O	ARG	A	817	19.118	55.586	-13.731	1.00	10.49	A
	ATOM	6421	N	ARG	A	818	18.780	56.475	-15.772	1.00	9.41	A
	ATOM	6422	CA	ARG	A	818	18.003	57.598	-15.276	1.00	11.11	A
35	ATOM	6423	CB	ARG	A	818	17.653	58.548	-16.422	1.00	12.00	A
	ATOM	6424	CG	ARG	A	818	16.996	59.843	-15.967	1.00	12.11	A
	ATOM	6425	CD	ARG	A	818	16.321	60.572	-17.123	1.00	13.88	A
	ATOM	6426	NE	ARG	A	818	15.045	59.954	-17.470	1.00	16.57	A
	ATOM	6427	CZ	ARG	A	818	14.776	59.370	-18.634	1.00	15.90	A
40	ATOM	6428	NH1	ARG	A	818	15.694	59.317	-19.591	1.00	15.20	A
	ATOM	6429	NH2	ARG	A	818	13.580	58.832	-18.837	1.00	17.09	A
	ATOM	6430	C	ARG	A	818	16.723	57.005	-14.703	1.00	11.22	A
	ATOM	6431	O	ARG	A	818	16.058	56.209	-15.366	1.00	12.29	A
	ATOM	6432	N	LEU	A	819	16.382	57.384	-13.477	1.00	11.61	A
45	ATOM	6433	CA	LEU	A	819	15.179	56.873	-12.829	1.00	12.56	A
	ATOM	6434	CB	LEU	A	819	15.545	56.177	-11.517	1.00	13.02	A
	ATOM	6435	CG	LEU	A	819	16.481	54.969	-11.645	1.00	13.25	A
	ATOM	6436	CD1	LEU	A	819	16.901	54.493	-10.260	1.00	13.84	A
	ATOM	6437	CD2	LEU	A	819	15.787	53.856	-12.420	1.00	14.25	A
50	ATOM	6438	C	LEU	A	819	14.210	58.013	-12.554	1.00	13.08	A
	ATOM	6439	O	LEU	A	819	14.459	58.857	-11.696	1.00	12.85	A
	ATOM	6440	N	ASP	A	820	13.101	58.037	-13.281	1.00	14.34	A
	ATOM	6441	CA	ASP	A	820	12.130	59.097	-13.088	1.00	14.92	A
	ATOM	6442	CB	ASP	A	820	11.147	59.133	-14.261	1.00	16.01	A
55	ATOM	6443	CG	ASP	A	820	11.841	59.387	-15.586	1.00	17.37	A
	ATOM	6444	OD1	ASP	A	820	12.852	60.123	-15.596	1.00	17.51	A
	ATOM	6445	OD2	ASP	A	820	11.378	58.862	-16.619	1.00	19.76	A
	ATOM	6446	C	ASP	A	820	11.397	58.964	-11.757	1.00	14.77	A
	ATOM	6447	O	ASP	A	820	10.706	59.888	-11.329	1.00	15.17	A

5	ATOM	6448	N	LYS	A	821	11.559	57.824	-11.089	1.00	14.77	A
	ATOM	6449	CA	LYS	A	821	10.913	57.630	-9.795	1.00	14.66	A
	ATOM	6450	CB	LYS	A	821	10.826	56.138	-9.445	1.00	14.60	A
	ATOM	6451	CG	LYS	A	821	12.163	55.452	-9.211	1.00	14.35	A
	ATOM	6452	CD	LYS	A	821	11.997	53.942	-9.154	1.00	14.29	A
	ATOM	6453	CE	LYS	A	821	13.335	53.242	-8.952	1.00	14.37	A
	ATOM	6454	NZ	LYS	A	821	13.215	51.764	-9.110	1.00	13.74	A
	ATOM	6455	C	LYS	A	821	11.699	58.384	-8.723	1.00	14.86	A
10	ATOM	6456	O	LYS	A	821	11.250	58.520	-7.586	1.00	15.44	A
	ATOM	6457	N	LEU	A	822	12.873	58.882	-9.102	1.00	14.33	A
	ATOM	6458	CA	LEU	A	822	13.718	59.644	-8.188	1.00	13.96	A
	ATOM	6459	CB	LEU	A	822	15.136	59.067	-8.157	1.00	13.85	A
15	ATOM	6460	CG	LEU	A	822	15.292	57.607	-7.720	1.00	14.60	A
	ATOM	6461	CD1	LEU	A	822	16.770	57.238	-7.716	1.00	14.62	A
	ATOM	6462	CD2	LEU	A	822	14.682	57.401	-6.338	1.00	14.91	A
	ATOM	6463	C	LEU	A	822	13.771	61.091	-8.666	1.00	14.06	A
20	ATOM	6464	O	LEU	A	822	13.600	61.362	-9.854	1.00	14.20	A
	ATOM	6465	N	PRO	A	823	14.007	62.040	-7.747	1.00	13.37	A
	ATOM	6466	CD	PRO	A	823	14.170	61.894	-6.290	1.00	13.31	A
	ATOM	6467	CA	PRO	A	823	14.073	63.450	-8.146	1.00	13.08	A
25	ATOM	6468	CB	PRO	A	823	14.109	64.191	-6.810	1.00	13.38	A
	ATOM	6469	CG	PRO	A	823	14.794	63.219	-5.902	1.00	14.39	A
	ATOM	6470	C	PRO	A	823	15.287	63.743	-9.026	1.00	12.91	A
	ATOM	6471	O	PRO	A	823	16.253	62.982	-9.050	1.00	12.74	A
30	ATOM	6472	N	LEU	A	824	15.222	64.855	-9.749	1.00	12.02	A
	ATOM	6473	CA	LEU	A	824	16.284	65.262	-10.658	1.00	11.44	A
	ATOM	6474	CB	LEU	A	824	16.019	66.702	-11.119	1.00	11.62	A
	ATOM	6475	CG	LEU	A	824	16.802	67.283	-12.297	1.00	11.24	A
35	ATOM	6476	CD1	LEU	A	824	16.058	68.500	-12.841	1.00	11.66	A
	ATOM	6477	CD2	LEU	A	824	18.217	67.649	-11.863	1.00	11.13	A
	ATOM	6478	C	LEU	A	824	17.692	65.146	-10.066	1.00	11.55	A
	ATOM	6479	O	LEU	A	824	18.583	64.559	-10.684	1.00	11.18	A
40	ATOM	6480	N	GLN	A	825	17.884	65.694	-8.870	1.00	11.18	A
	ATOM	6481	CA	GLN	A	825	19.197	65.675	-8.226	1.00	10.79	A
	ATOM	6482	CB	GLN	A	825	19.175	66.502	-6.931	1.00	11.13	A
	ATOM	6483	CG	GLN	A	825	18.246	65.972	-5.846	1.00	10.84	A
45	ATOM	6484	CD	GLN	A	825	16.829	66.517	-5.952	1.00	11.30	A
	ATOM	6485	OE1	GLN	A	825	16.400	66.980	-7.011	1.00	12.37	A
	ATOM	6486	NE2	GLN	A	825	16.092	66.450	-4.850	1.00	11.42	A
	ATOM	6487	C	GLN	A	825	19.741	64.280	-7.934	1.00	11.24	A
50	ATOM	6488	O	GLN	A	825	20.953	64.104	-7.778	1.00	11.09	A
	ATOM	6489	N	ALA	A	826	18.855	63.291	-7.866	1.00	10.37	A
	ATOM	6490	CA	ALA	A	826	19.278	61.921	-7.597	1.00	10.73	A
	ATOM	6491	CB	ALA	A	826	18.088	61.085	-7.131	1.00	10.59	A
55	ATOM	6492	C	ALA	A	826	19.884	61.304	-8.851	1.00	10.42	A
	ATOM	6493	O	ALA	A	826	20.657	60.348	-8.776	1.00	11.05	A
	ATOM	6494	N	ASN	A	827	19.532	61.857	-10.008	1.00	9.96	A
	ATOM	6495	CA	ASN	A	827	20.039	61.349	-11.272	1.00	9.71	A
55	ATOM	6496	CB	ASN	A	827	18.964	61.489	-12.349	1.00	10.42	A
	ATOM	6497	CG	ASN	A	827	17.836	60.490	-12.157	1.00	11.62	A
	ATOM	6498	OD1	ASN	A	827	18.050	59.282	-12.241	1.00	11.81	A
	ATOM	6499	ND2	ASN	A	827	16.639	60.986	-11.879	1.00	12.88	A
55	ATOM	6500	C	ASN	A	827	21.343	62.005	-11.694	1.00	9.32	A
	ATOM	6501	O	ASN	A	827	21.849	61.765	-12.788	1.00	9.65	A
	ATOM	6502	N	TYR	A	828	21.883	62.834	-10.807	1.00	9.16	A

5	ATOM	6503	CA	TYR	A	828	23.160	63.484	-11.056	1.00	8.54	A
	ATOM	6504	CB	TYR	A	828	23.222	64.852	-10.378	1.00	8.84	A
	ATOM	6505	CG	TYR	A	828	23.250	65.996	-11.363	1.00	9.15	A
	ATOM	6506	CD1	TYR	A	828	22.189	66.211	-12.243	1.00	8.96	A
	ATOM	6507	CE1	TYR	A	828	22.235	67.235	-13.187	1.00	9.56	A
10	ATOM	6508	CD2	TYR	A	828	24.357	66.839	-11.447	1.00	9.13	A
	ATOM	6509	CE2	TYR	A	828	24.412	67.863	-12.384	1.00	10.20	A
	ATOM	6510	CZ	TYR	A	828	23.351	68.055	-13.252	1.00	9.60	A
	ATOM	6511	OH	TYR	A	828	23.418	69.048	-14.198	1.00	10.53	A
	ATOM	6512	C	TYR	A	828	24.224	62.573	-10.459	1.00	8.13	A
15	ATOM	6513	O	TYR	A	828	24.041	62.030	-9.370	1.00	9.32	A
	ATOM	6514	N	TYR	A	829	25.324	62.398	-11.182	1.00	7.92	A
	ATOM	6515	CA	TYR	A	829	26.414	61.550	-10.726	1.00	7.93	A
	ATOM	6516	CB	TYR	A	829	26.458	60.251	-11.533	1.00	7.94	A
	ATOM	6517	CG	TYR	A	829	25.293	59.338	-11.271	1.00	8.32	A
20	ATOM	6518	CD1	TYR	A	829	24.122	59.432	-12.023	1.00	8.62	A
	ATOM	6519	CE1	TYR	A	829	23.028	58.613	-11.752	1.00	8.83	A
	ATOM	6520	CD2	TYR	A	829	25.346	58.402	-10.241	1.00	7.20	A
	ATOM	6521	CE2	TYR	A	829	24.258	57.579	-9.958	1.00	8.66	A
	ATOM	6522	CZ	TYR	A	829	23.103	57.690	-10.717	1.00	8.09	A
25	ATOM	6523	OH	TYR	A	829	22.023	56.884	-10.434	1.00	9.63	A
	ATOM	6524	C	TYR	A	829	27.745	62.257	-10.887	1.00	7.92	A
	ATOM	6525	O	TYR	A	829	27.848	63.264	-11.584	1.00	8.32	A
	ATOM	6526	N	PRO	A	830	28.787	61.740	-10.228	1.00	7.99	A
	ATOM	6527	CD	PRO	A	830	28.853	60.610	-9.286	1.00	9.08	A
30	ATOM	6528	CA	PRO	A	830	30.085	62.395	-10.376	1.00	8.33	A
	ATOM	6529	CB	PRO	A	830	30.971	61.672	-9.355	1.00	10.29	A
	ATOM	6530	CG	PRO	A	830	30.008	60.995	-8.414	1.00	10.63	A
	ATOM	6531	C	PRO	A	830	30.588	62.134	-11.797	1.00	7.87	A
	ATOM	6532	O	PRO	A	830	30.367	61.050	-12.345	1.00	7.95	A
35	ATOM	6533	N	ILE	A	831	31.225	63.128	-12.406	1.00	7.13	A
	ATOM	6534	CA	ILE	A	831	31.816	62.946	-13.728	1.00	7.22	A
	ATOM	6535	CB	ILE	A	831	31.253	63.925	-14.791	1.00	7.38	A
	ATOM	6536	CG2	ILE	A	831	31.722	63.484	-16.179	1.00	7.54	A
	ATOM	6537	CG1	ILE	A	831	29.715	63.962	-14.744	1.00	7.69	A
40	ATOM	6538	CD1	ILE	A	831	29.019	62.634	-15.056	1.00	7.75	A
	ATOM	6539	C	ILE	A	831	33.285	63.274	-13.468	1.00	7.77	A
	ATOM	6540	O	ILE	A	831	33.774	64.351	-13.821	1.00	7.24	A
	ATOM	6541	N	PRO	A	832	34.007	62.353	-12.810	1.00	7.31	A
	ATOM	6542	CD	PRO	A	832	33.562	61.108	-12.159	1.00	7.92	A
45	ATOM	6543	CA	PRO	A	832	35.417	62.626	-12.525	1.00	8.14	A
	ATOM	6544	CB	PRO	A	832	35.821	61.469	-11.600	1.00	7.96	A
	ATOM	6545	CG	PRO	A	832	34.862	60.381	-11.944	1.00	8.53	A
	ATOM	6546	C	PRO	A	832	36.322	62.793	-13.739	1.00	8.42	A
	ATOM	6547	O	PRO	A	832	37.307	63.523	-13.665	1.00	10.36	A
50	ATOM	6548	N	SER	A	833	35.996	62.142	-14.853	1.00	7.99	A
	ATOM	6549	CA	SER	A	833	36.822	62.293	-16.049	1.00	7.57	A
	ATOM	6550	CB	SER	A	833	38.028	61.346	-16.004	1.00	9.46	A
	ATOM	6551	OG	SER	A	833	37.664	60.014	-16.297	1.00	11.27	A
	ATOM	6552	C	SER	A	833	36.082	62.103	-17.370	1.00	7.78	A
55	ATOM	6553	O	SER	A	833	36.607	62.443	-18.426	1.00	6.86	A
	ATOM	6554	N	GLY	A	834	34.868	61.570	-17.328	1.00	6.96	A
	ATOM	6555	CA	GLY	A	834	34.156	61.391	-18.582	1.00	7.42	A
	ATOM	6556	C	GLY	A	834	32.773	60.792	-18.479	1.00	6.62	A
	ATOM	6557	O	GLY	A	834	32.394	60.209	-17.462	1.00	8.20	A

5	ATOM	6558	N	MSE	A	835	32.012	60.942	-19.556	1.00	6.65	A
	ATOM	6559	CA	MSE	A	835	30.658	60.420	-19.609	1.00	7.41	A
	ATOM	6560	CB	MSE	A	835	29.691	61.418	-18.964	1.00	9.50	A
	ATOM	6561	CG	MSE	A	835	29.580	62.740	-19.725	1.00	10.76	A
	ATOM	6562	SE	MSE	A	835	28.541	64.091	-18.811	1.00	18.06	A
	ATOM	6563	CE	MSE	A	835	26.954	63.069	-18.482	1.00	14.51	A
	ATOM	6564	C	MSE	A	835	30.281	60.220	-21.071	1.00	7.29	A
10	ATOM	6565	O	MSE	A	835	30.833	60.874	-21.960	1.00	7.55	A
	ATOM	6566	N	PHE	A	836	29.358	59.302	-21.329	1.00	7.61	A
	ATOM	6567	CA	PHE	A	836	28.914	59.098	-22.697	1.00	8.24	A
	ATOM	6568	CB	PHE	A	836	29.939	58.263	-23.501	1.00	7.78	A
15	ATOM	6569	CG	PHE	A	836	30.090	56.824	-23.057	1.00	8.69	A
	ATOM	6570	CD1	PHE	A	836	29.230	55.834	-23.536	1.00	8.19	A
	ATOM	6571	CD2	PHE	A	836	31.148	56.444	-22.232	1.00	9.29	A
	ATOM	6572	CE1	PHE	A	836	29.428	54.489	-23.205	1.00	10.52	A
	ATOM	6573	CE2	PHE	A	836	31.353	55.100	-21.896	1.00	9.66	A
20	ATOM	6574	CZ	PHE	A	836	30.490	54.122	-22.388	1.00	9.92	A
	ATOM	6575	C	PHE	A	836	27.529	58.493	-22.795	1.00	9.14	A
	ATOM	6576	O	PHE	A	836	27.011	57.927	-21.832	1.00	8.90	A
	ATOM	6577	N	ILE	A	837	26.912	58.686	-23.956	1.00	9.21	A
	ATOM	6578	CA	ILE	A	837	25.604	58.120	-24.257	1.00	9.71	A
	ATOM	6579	CB	ILE	A	837	24.474	59.175	-24.341	1.00	9.37	A
25	ATOM	6580	CG2	ILE	A	837	24.046	59.587	-22.947	1.00	10.54	A
	ATOM	6581	CG1	ILE	A	837	24.907	60.357	-25.208	1.00	9.45	A
	ATOM	6582	CD1	ILE	A	837	23.765	61.309	-25.552	1.00	9.78	A
	ATOM	6583	C	ILE	A	837	25.766	57.468	-25.616	1.00	9.49	A
	ATOM	6584	O	ILE	A	837	26.618	57.878	-26.413	1.00	9.37	A
30	ATOM	6585	N	GLU	A	838	24.968	56.442	-25.881	1.00	9.39	A
	ATOM	6586	CA	GLU	A	838	25.068	55.748	-27.155	1.00	10.00	A
	ATOM	6587	CB	GLU	A	838	26.232	54.751	-27.114	1.00	10.07	A
	ATOM	6588	CG	GLU	A	838	25.991	53.609	-26.121	1.00	11.82	A
	ATOM	6589	CD	GLU	A	838	27.115	52.585	-26.066	1.00	12.98	A
	ATOM	6590	OE1	GLU	A	838	26.983	51.612	-25.296	1.00	15.20	A
35	ATOM	6591	OE2	GLU	A	838	28.121	52.737	-26.784	1.00	15.16	A
	ATOM	6592	C	GLU	A	838	23.805	54.978	-27.484	1.00	10.72	A
	ATOM	6593	O	GLU	A	838	22.957	54.747	-26.626	1.00	10.48	A
	ATOM	6594	N	ASP	A	839	23.675	54.621	-28.754	1.00	11.70	A
40	ATOM	6595	CA	ASP	A	839	22.577	53.778	-29.192	1.00	12.02	A
	ATOM	6596	CB	ASP	A	839	21.508	54.533	-30.004	1.00	12.02	A
	ATOM	6597	CG	ASP	A	839	22.056	55.233	-31.231	1.00	11.88	A
	ATOM	6598	OD1	ASP	A	839	23.063	54.777	-31.810	1.00	13.51	A
	ATOM	6599	OD2	ASP	A	839	21.440	56.247	-31.629	1.00	15.05	A
45	ATOM	6600	C	ASP	A	839	23.267	52.704	-30.014	1.00	12.39	A
	ATOM	6601	O	ASP	A	839	24.476	52.517	-29.891	1.00	11.96	A
	ATOM	6602	N	ALA	A	840	22.525	51.990	-30.846	1.00	12.91	A
	ATOM	6603	CA	ALA	A	840	23.136	50.931	-31.634	1.00	13.57	A
50	ATOM	6604	CB	ALA	A	840	22.058	50.198	-32.427	1.00	13.53	A
	ATOM	6605	C	ALA	A	840	24.245	51.387	-32.579	1.00	13.48	A
	ATOM	6606	O	ALA	A	840	25.205	50.650	-32.815	1.00	14.95	A
	ATOM	6607	N	ASN	A	841	24.138	52.606	-33.100	1.00	13.29	A
	ATOM	6608	CA	ASN	A	841	25.118	53.083	-34.073	1.00	12.90	A
	ATOM	6609	CB	ASN	A	841	24.404	53.445	-35.377	1.00	14.72	A
55	ATOM	6610	CG	ASN	A	841	23.583	52.304	-35.927	1.00	15.43	A
	ATOM	6611	OD1	ASN	A	841	24.092	51.207	-36.136	1.00	18.11	A
	ATOM	6612	ND2	ASN	A	841	22.301	52.560	-36.167	1.00	17.87	A

5	ATOM	6613	C	ASN	A	841	26.011	54.258	-33.718	1.00	12.20	A
	ATOM	6614	O	ASN	A	841	27.100	54.389	-34.274	1.00	12.69	A
	ATOM	6615	N	THR	A	842	25.557	55.111	-32.810	1.00	11.81	A
	ATOM	6616	CA	THR	A	842	26.317	56.307	-32.485	1.00	11.57	A
	ATOM	6617	CB	THR	A	842	25.569	57.557	-33.001	1.00	11.76	A
10	ATOM	6618	OG1	THR	A	842	25.148	57.338	-34.354	1.00	13.92	A
	ATOM	6619	CG2	THR	A	842	26.470	58.786	-32.954	1.00	11.70	A
	ATOM	6620	C	THR	A	842	26.594	56.505	-31.005	1.00	10.99	A
	ATOM	6621	O	THR	A	842	25.796	56.123	-30.154	1.00	11.90	A
	ATOM	6622	N	ARG	A	843	27.738	57.116	-30.712	1.00	10.93	A
15	ATOM	6623	CA	ARG	A	843	28.110	57.411	-29.338	1.00	9.78	A
	ATOM	6624	CB	ARG	A	843	29.132	56.403	-28.801	1.00	10.05	A
	ATOM	6625	CG	ARG	A	843	29.601	56.731	-27.380	1.00	9.72	A
	ATOM	6626	CD	ARG	A	843	30.786	55.880	-26.941	1.00	9.07	A
	ATOM	6627	NE	ARG	A	843	30.421	54.502	-26.612	1.00	9.80	A
20	ATOM	6628	CZ	ARG	A	843	31.241	53.644	-26.011	1.00	9.80	A
	ATOM	6629	NH1	ARG	A	843	32.469	54.019	-25.675	1.00	9.81	A
	ATOM	6630	NH2	ARG	A	843	30.833	52.415	-25.731	1.00	10.05	A
	ATOM	6631	C	ARG	A	843	28.713	58.805	-29.262	1.00	9.19	A
	ATOM	6632	O	ARG	A	843	29.414	59.245	-30.179	1.00	8.90	A
25	ATOM	6633	N	LEU	A	844	28.409	59.501	-28.175	1.00	8.29	A
	ATOM	6634	CA	LEU	A	844	28.956	60.826	-27.930	1.00	7.96	A
	ATOM	6635	CB	LEU	A	844	27.871	61.908	-27.944	1.00	8.76	A
	ATOM	6636	CG	LEU	A	844	28.466	63.319	-27.799	1.00	9.51	A
	ATOM	6637	CD1	LEU	A	844	29.388	63.614	-28.981	1.00	10.57	A
30	ATOM	6638	CD2	LEU	A	844	27.353	64.350	-27.716	1.00	11.46	A
	ATOM	6639	C	LEU	A	844	29.597	60.755	-26.555	1.00	7.93	A
	ATOM	6640	O	LEU	A	844	28.924	60.463	-25.561	1.00	7.88	A
	ATOM	6641	N	THR	A	845	30.900	61.007	-26.516	1.00	8.37	A
	ATOM	6642	CA	THR	A	845	31.647	60.968	-25.268	1.00	8.30	A
35	ATOM	6643	CB	THR	A	845	32.823	59.975	-25.346	1.00	7.69	A
	ATOM	6644	OG1	THR	A	845	32.344	58.688	-25.762	1.00	7.36	A
	ATOM	6645	CG2	THR	A	845	33.494	59.837	-23.988	1.00	8.08	A
	ATOM	6646	C	THR	A	845	32.220	62.342	-24.949	1.00	8.06	A
	ATOM	6647	O	THR	A	845	32.815	62.996	-25.807	1.00	8.73	A
40	ATOM	6648	N	LEU	A	846	32.025	62.777	-23.713	1.00	8.51	A
	ATOM	6649	CA	LEU	A	846	32.552	64.054	-23.264	1.00	7.79	A
	ATOM	6650	CB	LEU	A	846	31.444	64.924	-22.667	1.00	8.89	A
	ATOM	6651	CG	LEU	A	846	31.893	66.296	-22.158	1.00	9.02	A
	ATOM	6652	CD1	LEU	A	846	32.337	67.159	-23.333	1.00	9.99	A
45	ATOM	6653	CD2	LEU	A	846	30.751	66.964	-21.402	1.00	11.17	A
	ATOM	6654	C	LEU	A	846	33.583	63.733	-22.193	1.00	7.73	A
	ATOM	6655	O	LEU	A	846	33.241	63.165	-21.155	1.00	7.34	A
	ATOM	6656	N	LEU	A	847	34.843	64.057	-22.467	1.00	7.27	A
	ATOM	6657	CA	LEU	A	847	35.919	63.824	-21.509	1.00	6.61	A
50	ATOM	6658	CB	LEU	A	847	37.194	63.357	-22.214	1.00	7.48	A
	ATOM	6659	CG	LEU	A	847	37.177	62.018	-22.965	1.00	6.64	A
	ATOM	6660	CD1	LEU	A	847	36.564	60.942	-22.078	1.00	7.20	A
	ATOM	6661	CD2	LEU	A	847	36.393	62.144	-24.267	1.00	7.29	A
	ATOM	6662	C	LEU	A	847	36.181	65.138	-20.786	1.00	7.24	A
55	ATOM	6663	O	LEU	A	847	36.068	66.214	-21.389	1.00	7.43	A
	ATOM	6664	N	THR	A	848	36.531	65.058	-19.503	1.00	6.70	A
	ATOM	6665	CA	THR	A	848	36.781	66.268	-18.716	1.00	8.11	A
	ATOM	6666	CB	THR	A	848	35.796	66.393	-17.537	1.00	9.99	A
	ATOM	6667	OG1	THR	A	848	36.158	65.457	-16.510	1.00	12.32	A

5	ATOM	6668	CG2	THR	A	848	34.383	66.109	-17.986	1.00	10.74	A
	ATOM	6669	C	THR	A	848	38.183	66.365	-18.127	1.00	8.03	A
	ATOM	6670	O	THR	A	848	38.852	65.354	-17.886	1.00	8.97	A
	ATOM	6671	N	GLY	A	849	38.620	67.598	-17.891	1.00	7.93	A
	ATOM	6672	CA	GLY	A	849	39.923	67.822	-17.298	1.00	7.56	A
10	ATOM	6673	C	GLY	A	849	39.761	68.195	-15.836	1.00	7.38	A
	ATOM	6674	O	GLY	A	849	40.708	68.628	-15.182	1.00	7.22	A
	ATOM	6675	N	GLN	A	850	38.544	68.027	-15.328	1.00	6.67	A
	ATOM	6676	CA	GLN	A	850	38.219	68.334	-13.940	1.00	7.10	A
	ATOM	6677	CB	GLN	A	850	38.021	69.847	-13.759	1.00	7.43	A
15	ATOM	6678	CG	GLN	A	850	36.891	70.455	-14.612	1.00	7.11	A
	ATOM	6679	CD	GLN	A	850	37.239	70.552	-16.086	1.00	7.63	A
	ATOM	6680	OE1	GLN	A	850	38.338	70.967	-16.454	1.00	8.22	A
	ATOM	6681	NE2	GLN	A	850	36.289	70.183	-16.945	1.00	7.13	A
	ATOM	6682	C	GLN	A	850	36.939	67.601	-13.543	1.00	7.56	A
20	ATOM	6683	O	GLN	A	850	36.058	67.387	-14.375	1.00	7.52	A
	ATOM	6684	N	PRO	A	851	36.827	67.194	-12.269	1.00	6.72	A
	ATOM	6685	CD	PRO	A	851	37.849	67.209	-11.207	1.00	6.45	A
	ATOM	6686	CA	PRO	A	851	35.619	66.492	-11.829	1.00	6.46	A
	ATOM	6687	CB	PRO	A	851	36.060	65.825	-10.525	1.00	6.15	A
25	ATOM	6688	CG	PRO	A	851	37.056	66.810	-9.976	1.00	6.55	A
	ATOM	6689	C	PRO	A	851	34.473	67.474	-11.623	1.00	7.19	A
	ATOM	6690	O	PRO	A	851	34.643	68.516	-10.982	1.00	7.03	A
	ATOM	6691	N	LEU	A	852	33.316	67.144	-12.190	1.00	7.54	A
	ATOM	6692	CA	LEU	A	852	32.120	67.977	-12.083	1.00	8.39	A
30	ATOM	6693	CB	LEU	A	852	32.022	68.920	-13.290	1.00	8.88	A
	ATOM	6694	CG	LEU	A	852	33.166	69.925	-13.485	1.00	8.62	A
	ATOM	6695	CD1	LEU	A	852	33.096	70.522	-14.891	1.00	9.44	A
	ATOM	6696	CD2	LEU	A	852	33.089	71.015	-12.431	1.00	8.95	A
	ATOM	6697	C	LEU	A	852	30.905	67.055	-12.048	1.00	8.99	A
35	ATOM	6698	O	LEU	A	852	31.022	65.872	-12.351	1.00	10.89	A
	ATOM	6699	N	GLY	A	853	29.750	67.593	-11.673	1.00	7.59	A
	ATOM	6700	CA	GLY	A	853	28.545	66.781	-11.619	1.00	7.39	A
	ATOM	6701	C	GLY	A	853	27.827	66.774	-12.955	1.00	7.76	A
	ATOM	6702	O	GLY	A	853	27.871	67.760	-13.699	1.00	7.36	A
40	ATOM	6703	N	GLY	A	854	27.157	65.672	-13.273	1.00	6.90	A
	ATOM	6704	CA	GLY	A	854	26.458	65.610	-14.543	1.00	8.09	A
	ATOM	6705	C	GLY	A	854	25.406	64.527	-14.623	1.00	7.89	A
	ATOM	6706	O	GLY	A	854	25.239	63.734	-13.695	1.00	8.50	A
	ATOM	6707	N	SER	A	855	24.703	64.480	-15.749	1.00	8.37	A
45	ATOM	6708	CA	SER	A	855	23.649	63.494	-15.931	1.00	9.33	A
	ATOM	6709	CB	SER	A	855	22.461	63.853	-15.032	1.00	10.99	A
	ATOM	6710	OG	SER	A	855	21.407	62.906	-15.128	1.00	10.64	A
	ATOM	6711	C	SER	A	855	23.186	63.483	-17.378	1.00	9.38	A
	ATOM	6712	O	SER	A	855	23.755	64.156	-18.237	1.00	9.01	A
50	ATOM	6713	N	SER	A	856	22.153	62.687	-17.629	1.00	9.89	A
	ATOM	6714	CA	SER	A	856	21.502	62.599	-18.933	1.00	10.04	A
	ATOM	6715	CB	SER	A	856	21.872	61.313	-19.670	1.00	9.85	A
	ATOM	6716	OG	SER	A	856	21.144	61.223	-20.889	1.00	10.25	A
	ATOM	6717	C	SER	A	856	20.041	62.560	-18.515	1.00	10.83	A
55	ATOM	6718	O	SER	A	856	19.507	61.496	-18.203	1.00	11.04	A
	ATOM	6719	N	LEU	A	857	19.405	63.729	-18.491	1.00	11.03	A
	ATOM	6720	CA	LEU	A	857	18.020	63.834	-18.051	1.00	11.33	A
	ATOM	6721	CB	LEU	A	857	17.776	65.233	-17.475	1.00	12.21	A
	ATOM	6722	CG	LEU	A	857	18.613	65.514	-16.224	1.00	12.41	A

5	ATOM	6723	CD1	LEU	A	857	18.420	66.959	-15.772	1.00	12.54	A
	ATOM	6724	CD2	LEU	A	857	18.213	64.538	-15.117	1.00	13.38	A
	ATOM	6725	C	LEU	A	857	16.970	63.499	-19.099	1.00	11.41	A
	ATOM	6726	O	LEU	A	857	15.775	63.478	-18.800	1.00	12.16	A
	ATOM	6727	N	ALA	A	858	17.422	63.235	-20.320	1.00	10.23	A
	ATOM	6728	CA	ALA	A	858	16.532	62.871	-21.417	1.00	10.98	A
	ATOM	6729	CB	ALA	A	858	15.852	64.117	-21.999	1.00	10.30	A
	ATOM	6730	C	ALA	A	858	17.333	62.156	-22.494	1.00	11.53	A
10	ATOM	6731	O	ALA	A	858	18.530	62.395	-22.655	1.00	11.99	A
	ATOM	6732	N	SER	A	859	16.667	61.270	-23.226	1.00	11.71	A
	ATOM	6733	CA	SER	A	859	17.314	60.518	-24.287	1.00	11.84	A
	ATOM	6734	CB	SER	A	859	16.265	59.722	-25.077	1.00	12.18	A
15	ATOM	6735	OG	SER	A	859	16.863	58.942	-26.094	1.00	13.57	A
	ATOM	6736	C	SER	A	859	18.063	61.465	-25.218	1.00	11.69	A
	ATOM	6737	O	SER	A	859	17.535	62.508	-25.612	1.00	12.09	A
	ATOM	6738	N	GLY	A	860	19.299	61.101	-25.542	1.00	11.53	A
20	ATOM	6739	CA	GLY	A	860	20.117	61.904	-26.435	1.00	11.19	A
	ATOM	6740	C	GLY	A	860	20.846	63.073	-25.798	1.00	11.05	A
	ATOM	6741	O	GLY	A	860	21.585	63.780	-26.483	1.00	10.94	A
	ATOM	6742	N	GLU	A	861	20.665	63.276	-24.496	1.00	10.54	A
	ATOM	6743	CA	GLU	A	861	21.318	64.390	-23.812	1.00	10.72	A
	ATOM	6744	CB	GLU	A	861	20.309	65.181	-22.981	1.00	11.69	A
25	ATOM	6745	CG	GLU	A	861	19.143	65.764	-23.742	1.00	13.84	A
	ATOM	6746	CD	GLU	A	861	18.277	66.649	-22.863	1.00	14.55	A
	ATOM	6747	OE1	GLU	A	861	18.521	66.706	-21.638	1.00	15.28	A
	ATOM	6748	OE2	GLU	A	861	17.348	67.291	-23.395	1.00	16.06	A
	ATOM	6749	C	GLU	A	861	22.460	64.020	-22.874	1.00	10.67	A
30	ATOM	6750	O	GLU	A	861	22.543	62.907	-22.357	1.00	10.90	A
	ATOM	6751	N	LEU	A	862	23.333	64.998	-22.665	1.00	10.06	A
	ATOM	6752	CA	LEU	A	862	24.455	64.894	-21.736	1.00	9.88	A
	ATOM	6753	CB	LEU	A	862	25.775	64.590	-22.451	1.00	9.80	A
	ATOM	6754	CG	LEU	A	862	26.088	63.195	-22.990	1.00	9.38	A
	ATOM	6755	CD1	LEU	A	862	27.467	63.212	-23.644	1.00	8.93	A
35	ATOM	6756	CD2	LEU	A	862	26.054	62.182	-21.852	1.00	10.32	A
	ATOM	6757	C	LEU	A	862	24.553	66.286	-21.143	1.00	9.97	A
	ATOM	6758	O	LEU	A	862	24.420	67.272	-21.865	1.00	10.40	A
	ATOM	6759	N	GLU	A	863	24.748	66.387	-19.838	1.00	9.17	A
40	ATOM	6760	CA	GLU	A	863	24.905	67.705	-19.243	1.00	8.61	A
	ATOM	6761	CB	GLU	A	863	23.562	68.289	-18.791	1.00	9.86	A
	ATOM	6762	CG	GLU	A	863	22.976	67.732	-17.514	1.00	9.77	A
	ATOM	6763	CD	GLU	A	863	21.678	68.431	-17.154	1.00	10.41	A
	ATOM	6764	OE1	GLU	A	863	21.570	68.956	-16.028	1.00	10.63	A
	ATOM	6765	OE2	GLU	A	863	20.764	68.458	-18.008	1.00	11.95	A
45	ATOM	6766	C	GLU	A	863	25.878	67.629	-18.090	1.00	9.12	A
	ATOM	6767	O	GLU	A	863	25.975	66.608	-17.408	1.00	7.97	A
	ATOM	6768	N	ILE	A	864	26.612	68.713	-17.887	1.00	9.26	A
	ATOM	6769	CA	ILE	A	864	27.608	68.757	-16.835	1.00	9.59	A
50	ATOM	6770	CB	ILE	A	864	28.987	68.324	-17.416	1.00	9.91	A
	ATOM	6771	CG2	ILE	A	864	29.401	69.265	-18.541	1.00	10.24	A
	ATOM	6772	CG1	ILE	A	864	30.040	68.250	-16.308	1.00	10.77	A
	ATOM	6773	CD1	ILE	A	864	31.299	67.497	-16.735	1.00	11.71	A
	ATOM	6774	C	ILE	A	864	27.649	70.161	-16.234	1.00	9.24	A
55	ATOM	6775	O	ILE	A	864	27.713	71.164	-16.956	1.00	9.45	A
	ATOM	6776	N	MSE	A	865	27.580	70.226	-14.908	1.00	8.75	A
	ATOM	6777	CA	MSE	A	865	27.580	71.496	-14.193	1.00	9.06	A

5	ATOM	6778	CB	MSE	A	865	27.176	71.269	-12.733	1.00	11.05	A
	ATOM	6779	CG	MSE	A	865	26.538	72.478	-12.066	1.00	11.46	A
	ATOM	6780	SE	MSE	A	865	24.827	72.915	-12.863	1.00	18.59	A
	ATOM	6781	CE	MSE	A	865	23.751	71.627	-11.924	1.00	12.98	A
	ATOM	6782	C	MSE	A	865	28.936	72.200	-14.257	1.00	9.30	A
	ATOM	6783	O	MSE	A	865	29.984	71.569	-14.105	1.00	9.37	A
	ATOM	6784	N	GLN	A	866	28.903	73.514	-14.467	1.00	9.20	A
	ATOM	6785	CA	GLN	A	866	30.121	74.316	-14.581	1.00	8.74	A
10	ATOM	6786	CB	GLN	A	866	29.942	75.368	-15.673	1.00	9.56	A
	ATOM	6787	CG	GLN	A	866	29.577	74.765	-17.013	1.00	9.63	A
	ATOM	6788	CD	GLN	A	866	30.598	73.749	-17.470	1.00	9.75	A
	ATOM	6789	OE1	GLN	A	866	31.725	74.097	-17.823	1.00	10.41	A
15	ATOM	6790	NE2	GLN	A	866	30.215	72.479	-17.449	1.00	9.11	A
	ATOM	6791	C	GLN	A	866	30.513	74.986	-13.271	1.00	9.34	A
	ATOM	6792	O	GLN	A	866	31.686	75.021	-12.910	1.00	9.31	A
	ATOM	6793	N	ASP	A	867	29.529	75.549	-12.580	1.00	9.02	A
	ATOM	6794	CA	ASP	A	867	29.770	76.177	-11.288	1.00	9.28	A
	ATOM	6795	CB	ASP	A	867	30.539	77.495	-11.430	1.00	9.80	A
20	ATOM	6796	CG	ASP	A	867	31.224	77.920	-10.128	1.00	9.59	A
	ATOM	6797	OD1	ASP	A	867	31.051	77.242	-9.089	1.00	9.81	A
	ATOM	6798	OD2	ASP	A	867	31.944	78.937	-10.144	1.00	11.47	A
	ATOM	6799	C	ASP	A	867	28.430	76.428	-10.630	1.00	9.67	A
25	ATOM	6800	O	ASP	A	867	27.381	76.361	-11.281	1.00	10.05	A
	ATOM	6801	N	ARG	A	868	28.470	76.705	-9.335	1.00	10.02	A
	ATOM	6802	CA	ARG	A	868	27.263	76.958	-8.573	1.00	10.34	A
	ATOM	6803	CB	ARG	A	868	26.748	75.646	-7.969	1.00	10.15	A
30	ATOM	6804	CG	ARG	A	868	27.773	74.880	-7.138	1.00	10.84	A
	ATOM	6805	CD	ARG	A	868	27.464	73.380	-7.140	1.00	10.25	A
	ATOM	6806	NE	ARG	A	868	26.101	73.108	-6.696	1.00	9.69	A
	ATOM	6807	CZ	ARG	A	868	25.761	72.818	-5.444	1.00	9.26	A
	ATOM	6808	NH1	ARG	A	868	26.687	72.743	-4.496	1.00	8.58	A
	ATOM	6809	NH2	ARG	A	868	24.486	72.628	-5.136	1.00	9.51	A
35	ATOM	6810	C	ARG	A	868	27.570	77.977	-7.486	1.00	10.82	A
	ATOM	6811	O	ARG	A	868	28.606	77.901	-6.825	1.00	11.25	A
	ATOM	6812	N	ARG	A	869	26.671	78.944	-7.333	1.00	10.70	A
	ATOM	6813	CA	ARG	A	869	26.816	80.003	-6.337	1.00	11.61	A
	ATOM	6814	CB	ARG	A	869	26.990	81.357	-7.037	1.00	11.61	A
	ATOM	6815	CG	ARG	A	869	27.262	82.532	-6.103	1.00	12.74	A
40	ATOM	6816	CD	ARG	A	869	27.557	83.804	-6.889	1.00	13.91	A
	ATOM	6817	NE	ARG	A	869	27.739	84.974	-6.029	1.00	15.08	A
	ATOM	6818	CZ	ARG	A	869	28.853	85.263	-5.364	1.00	15.70	A
	ATOM	6819	NH1	ARG	A	869	29.911	84.470	-5.451	1.00	16.09	A
45	ATOM	6820	NH2	ARG	A	869	28.907	86.351	-4.605	1.00	17.21	A
	ATOM	6821	C	ARG	A	869	25.525	79.962	-5.531	1.00	12.83	A
	ATOM	6822	O	ARG	A	869	24.445	80.221	-6.061	1.00	12.65	A
	ATOM	6823	N	LEU	A	870	25.650	79.610	-4.255	1.00	13.19	A
	ATOM	6824	CA	LEU	A	870	24.505	79.472	-3.357	1.00	14.88	A
	ATOM	6825	CB	LEU	A	870	24.395	78.012	-2.934	1.00	14.84	A
50	ATOM	6826	CG	LEU	A	870	24.440	77.060	-4.132	1.00	16.12	A
	ATOM	6827	CD1	LEU	A	870	24.778	75.671	-3.659	1.00	16.16	A
	ATOM	6828	CD2	LEU	A	870	23.116	77.092	-4.880	1.00	15.69	A
	ATOM	6829	C	LEU	A	870	24.603	80.362	-2.123	1.00	15.84	A
55	ATOM	6830	O	LEU	A	870	25.596	80.333	-1.396	1.00	15.42	A
	ATOM	6831	N	ALA	A	871	23.548	81.131	-1.877	1.00	17.32	A
	ATOM	6832	CA	ALA	A	871	23.521	82.055	-0.752	1.00	19.19	A

5	ATOM	6833	CB	ALA	A	871	22.497	83.152	-1.023	1.00	19.49	A
	ATOM	6834	C	ALA	A	871	23.250	81.427	0.611	1.00	20.12	A
	ATOM	6835	O	ALA	A	871	23.687	81.954	1.634	1.00	21.06	A
	ATOM	6836	N	SER	A	872	22.546	80.303	0.640	1.00	20.24	A
	ATOM	6837	CA	SER	A	872	22.227	79.684	1.921	1.00	20.96	A
	ATOM	6838	CB	SER	A	872	20.729	79.374	1.988	1.00	22.69	A
	ATOM	6839	OG	SER	A	872	20.354	78.455	0.981	1.00	26.69	A
	ATOM	6840	C	SER	A	872	23.016	78.430	2.275	1.00	20.07	A
10	ATOM	6841	O	SER	A	872	23.619	77.782	1.418	1.00	19.32	A
	ATOM	6842	N	ASP	A	873	23.009	78.115	3.567	1.00	19.80	A
	ATOM	6843	CA	ASP	A	873	23.680	76.938	4.105	1.00	19.26	A
	ATOM	6844	CB	ASP	A	873	24.046	77.187	5.572	1.00	19.50	A
	ATOM	6845	CG	ASP	A	873	24.426	75.918	6.308	1.00	19.97	A
15	ATOM	6846	OD1	ASP	A	873	23.546	75.332	6.977	1.00	19.80	A
	ATOM	6847	OD2	ASP	A	873	25.602	75.505	6.214	1.00	20.62	A
	ATOM	6848	C	ASP	A	873	22.697	75.779	3.979	1.00	18.67	A
	ATOM	6849	O	ASP	A	873	21.488	75.985	4.077	1.00	18.83	A
	ATOM	6850	N	ASP	A	874	23.201	74.568	3.752	1.00	17.49	A
20	ATOM	6851	CA	ASP	A	874	22.318	73.417	3.602	1.00	16.56	A
	ATOM	6852	CB	ASP	A	874	22.678	72.623	2.338	1.00	15.33	A
	ATOM	6853	CG	ASP	A	874	24.160	72.341	2.217	1.00	15.79	A
	ATOM	6854	OD1	ASP	A	874	24.932	72.741	3.115	1.00	14.72	A
	ATOM	6855	OD2	ASP	A	874	24.547	71.716	1.210	1.00	13.54	A
25	ATOM	6856	C	ASP	A	874	22.226	72.486	4.809	1.00	17.23	A
	ATOM	6857	O	ASP	A	874	22.119	71.269	4.668	1.00	17.24	A
	ATOM	6858	N	GLU	A	875	22.270	73.083	5.995	1.00	17.61	A
	ATOM	6859	CA	GLU	A	875	22.132	72.370	7.261	1.00	18.30	A
	ATOM	6860	CB	GLU	A	875	20.653	72.025	7.481	1.00	21.02	A
30	ATOM	6861	CG	GLU	A	875	19.741	73.249	7.502	1.00	24.64	A
	ATOM	6862	CD	GLU	A	875	18.302	72.916	7.858	1.00	26.93	A
	ATOM	6863	OE1	GLU	A	875	18.069	72.346	8.945	1.00	28.85	A
	ATOM	6864	OE2	GLU	A	875	17.401	73.230	7.053	1.00	29.01	A
	ATOM	6865	C	GLU	A	875	22.977	71.123	7.503	1.00	17.56	A
35	ATOM	6866	O	GLU	A	875	22.499	70.160	8.109	1.00	17.20	A
	ATOM	6867	N	ARG	A	876	24.226	71.130	7.051	1.00	16.12	A
	ATOM	6868	CA	ARG	A	876	25.091	69.980	7.285	1.00	15.68	A
	ATOM	6869	CB	ARG	A	876	25.519	69.343	5.955	1.00	14.98	A
	ATOM	6870	CG	ARG	A	876	24.365	68.665	5.196	1.00	14.42	A
40	ATOM	6871	CD	ARG	A	876	23.701	67.581	6.046	1.00	13.74	A
	ATOM	6872	NE	ARG	A	876	22.636	66.850	5.354	1.00	13.11	A
	ATOM	6873	CZ	ARG	A	876	21.460	67.366	5.004	1.00	13.22	A
	ATOM	6874	NH1	ARG	A	876	21.179	68.636	5.267	1.00	12.68	A
	ATOM	6875	NH2	ARG	A	876	20.548	66.601	4.411	1.00	12.89	A
45	ATOM	6876	C	ARG	A	876	26.307	70.364	8.130	1.00	15.55	A
	ATOM	6877	O	ARG	A	876	27.273	69.605	8.231	1.00	16.13	A
	ATOM	6878	N	GLY	A	877	26.249	71.548	8.738	1.00	15.42	A
	ATOM	6879	CA	GLY	A	877	27.328	71.996	9.601	1.00	14.96	A
	ATOM	6880	C	GLY	A	877	28.340	72.984	9.049	1.00	14.99	A
50	ATOM	6881	O	GLY	A	877	29.112	73.563	9.818	1.00	14.85	A
	ATOM	6882	N	LEU	A	878	28.344	73.192	7.736	1.00	14.62	A
	ATOM	6883	CA	LEU	A	878	29.299	74.113	7.122	1.00	15.39	A
	ATOM	6884	CB	LEU	A	878	29.168	74.072	5.597	1.00	14.87	A
	ATOM	6885	CG	LEU	A	878	30.078	74.997	4.782	1.00	15.40	A
55	ATOM	6886	CD1	LEU	A	878	31.532	74.844	5.224	1.00	15.22	A
	ATOM	6887	CD2	LEU	A	878	29.928	74.663	3.308	1.00	15.32	A

5	ATOM	6888	C	LEU	A	878	29.134	75.543	7.630	1.00	15.66	A
	ATOM	6889	O	LEU	A	878	30.119	76.257	7.823	1.00	15.76	A
	ATOM	6890	N	GLY	A	879	27.888	75.957	7.843	1.00	15.47	A
	ATOM	6891	CA	GLY	A	879	27.631	77.293	8.355	1.00	16.15	A
	ATOM	6892	C	GLY	A	879	27.788	78.428	7.361	1.00	16.58	A
10	ATOM	6893	O	GLY	A	879	27.968	79.580	7.755	1.00	17.29	A
	ATOM	6894	N	GLN	A	880	27.729	78.108	6.074	1.00	16.52	A
	ATOM	6895	CA	GLN	A	880	27.843	79.125	5.035	1.00	16.57	A
	ATOM	6896	CB	GLN	A	880	29.284	79.648	4.919	1.00	16.88	A
	ATOM	6897	CG	GLN	A	880	30.329	78.599	4.526	1.00	17.13	A
15	ATOM	6898	CD	GLN	A	880	31.561	79.211	3.873	1.00	17.00	A
	ATOM	6899	OE1	GLN	A	880	31.577	79.470	2.665	1.00	18.68	A
	ATOM	6900	NE2	GLN	A	880	32.594	79.458	4.668	1.00	15.41	A
	ATOM	6901	C	GLN	A	880	27.415	78.556	3.696	1.00	16.89	A
	ATOM	6902	O	GLN	A	880	27.350	77.338	3.519	1.00	17.17	A
20	ATOM	6903	N	GLY	A	881	27.104	79.447	2.762	1.00	17.12	A
	ATOM	6904	CA	GLY	A	881	26.725	79.010	1.436	1.00	16.41	A
	ATOM	6905	C	GLY	A	881	28.008	78.947	0.634	1.00	15.96	A
	ATOM	6906	O	GLY	A	881	29.092	78.817	1.203	1.00	16.71	A
	ATOM	6907	N	VAL	A	882	27.893	79.037	-0.682	1.00	14.79	A
25	ATOM	6908	CA	VAL	A	882	29.060	79.011	-1.552	1.00	14.14	A
	ATOM	6909	CB	VAL	A	882	28.998	77.814	-2.520	1.00	13.86	A
	ATOM	6910	CG1	VAL	A	882	30.185	77.843	-3.463	1.00	13.33	A
	ATOM	6911	CG2	VAL	A	882	28.987	76.517	-1.726	1.00	14.87	A
	ATOM	6912	C	VAL	A	882	29.029	80.320	-2.328	1.00	13.86	A
30	ATOM	6913	O	VAL	A	882	28.353	80.432	-3.348	1.00	13.36	A
	ATOM	6914	N	LEU	A	883	29.755	81.312	-1.823	1.00	13.97	A
	ATOM	6915	CA	LEU	A	883	29.791	82.635	-2.440	1.00	14.37	A
	ATOM	6916	CB	LEU	A	883	29.119	83.650	-1.505	1.00	14.55	A
	ATOM	6917	CG	LEU	A	883	27.615	83.481	-1.256	1.00	14.33	A
35	ATOM	6918	CD1	LEU	A	883	27.175	84.299	-0.052	1.00	14.92	A
	ATOM	6919	CD2	LEU	A	883	26.859	83.928	-2.490	1.00	14.87	A
	ATOM	6920	C	LEU	A	883	31.209	83.100	-2.761	1.00	14.74	A
	ATOM	6921	O	LEU	A	883	31.432	84.280	-3.044	1.00	16.88	A
	ATOM	6922	N	ASP	A	884	32.162	82.174	-2.723	1.00	14.04	A
40	ATOM	6923	CA	ASP	A	884	33.555	82.500	-2.998	1.00	14.10	A
	ATOM	6924	CB	ASP	A	884	34.458	81.898	-1.918	1.00	14.38	A
	ATOM	6925	CG	ASP	A	884	34.250	80.402	-1.737	1.00	15.01	A
	ATOM	6926	OD1	ASP	A	884	34.925	79.826	-0.858	1.00	16.17	A
	ATOM	6927	OD2	ASP	A	884	33.421	79.803	-2.461	1.00	13.93	A
45	ATOM	6928	C	ASP	A	884	34.021	82.044	-4.376	1.00	13.67	A
	ATOM	6929	O	ASP	A	884	35.193	81.721	-4.570	1.00	13.79	A
	ATOM	6930	N	ASN	A	885	33.095	82.024	-5.329	1.00	12.72	A
	ATOM	6931	CA	ASN	A	885	33.404	81.620	-6.695	1.00	12.83	A
	ATOM	6932	CB	ASN	A	885	32.163	81.746	-7.579	1.00	12.72	A
50	ATOM	6933	CG	ASN	A	885	30.973	81.001	-7.024	1.00	12.80	A
	ATOM	6934	OD1	ASN	A	885	30.700	79.860	-7.403	1.00	13.90	A
	ATOM	6935	ND2	ASN	A	885	30.257	81.640	-6.109	1.00	12.56	A
	ATOM	6936	C	ASN	A	885	34.499	82.493	-7.289	1.00	12.83	A
	ATOM	6937	O	ASN	A	885	34.643	83.666	-6.936	1.00	12.92	A
55	ATOM	6938	N	LYS	A	886	35.265	81.910	-8.202	1.00	13.20	A
	ATOM	6939	CA	LYS	A	886	36.329	82.624	-8.887	1.00	13.92	A
	ATOM	6940	CB	LYS	A	886	37.657	82.454	-8.140	1.00	16.49	A
	ATOM	6941	CG	LYS	A	886	38.096	81.015	-7.938	1.00	17.99	A
	ATOM	6942	CD	LYS	A	886	39.235	80.913	-6.924	1.00	20.54	A

5	ATOM	6943	CE	LYS	A	886	40.472	81.669	-7.386	1.00	21.34	A
	ATOM	6944	NZ	LYS	A	886	41.570	81.615	-6.383	1.00	22.47	A
	ATOM	6945	C	LYS	A	886	36.420	82.055	-10.295	1.00	12.96	A
	ATOM	6946	O	LYS	A	886	36.052	80.903	-10.534	1.00	12.96	A
	ATOM	6947	N	PRO	A	887	36.890	82.859	-11.256	1.00	12.00	A
10	ATOM	6948	CD	PRO	A	887	37.275	84.279	-11.160	1.00	12.17	A
	ATOM	6949	CA	PRO	A	887	37.002	82.378	-12.633	1.00	10.97	A
	ATOM	6950	CB	PRO	A	887	37.687	83.537	-13.348	1.00	11.84	A
	ATOM	6951	CG	PRO	A	887	37.179	84.731	-12.593	1.00	12.42	A
	ATOM	6952	C	PRO	A	887	37.805	81.087	-12.734	1.00	10.67	A
15	ATOM	6953	O	PRO	A	887	38.866	80.951	-12.129	1.00	11.60	A
	ATOM	6954	N	VAL	A	888	37.282	80.137	-13.498	1.00	9.48	A
	ATOM	6955	CA	VAL	A	888	37.955	78.867	-13.692	1.00	8.96	A
	ATOM	6956	CB	VAL	A	888	37.335	77.755	-12.797	1.00	9.00	A
	ATOM	6957	CG1	VAL	A	888	35.836	77.648	-13.048	1.00	9.81	A
20	ATOM	6958	CG2	VAL	A	888	38.021	76.424	-13.064	1.00	9.13	A
	ATOM	6959	C	VAL	A	888	37.852	78.466	-15.153	1.00	8.88	A
	ATOM	6960	O	VAL	A	888	36.823	78.697	-15.802	1.00	8.91	A
	ATOM	6961	N	LEU	A	889	38.928	77.890	-15.677	1.00	7.75	A
	ATOM	6962	CA	LEU	A	889	38.935	77.435	-17.058	1.00	8.80	A
25	ATOM	6963	CB	LEU	A	889	40.257	77.794	-17.745	1.00	9.25	A
	ATOM	6964	CG	LEU	A	889	40.336	77.379	-19.223	1.00	9.85	A
	ATOM	6965	CD1	LEU	A	889	39.386	78.245	-20.050	1.00	11.06	A
	ATOM	6966	CD2	LEU	A	889	41.766	77.529	-19.728	1.00	12.10	A
	ATOM	6967	C	LEU	A	889	38.731	75.924	-17.113	1.00	8.95	A
30	ATOM	6968	O	LEU	A	889	39.648	75.150	-16.820	1.00	9.54	A
	ATOM	6969	N	HIS	A	890	37.519	75.508	-17.462	1.00	7.95	A
	ATOM	6970	CA	HIS	A	890	37.214	74.086	-17.580	1.00	8.10	A
	ATOM	6971	CB	HIS	A	890	35.725	73.824	-17.360	1.00	7.90	A
	ATOM	6972	CG	HIS	A	890	35.281	73.998	-15.944	1.00	8.99	A
35	ATOM	6973	CD2	HIS	A	890	34.112	74.441	-15.426	1.00	9.25	A
	ATOM	6974	ND1	HIS	A	890	36.066	73.637	-14.870	1.00	9.76	A
	ATOM	6975	CE1	HIS	A	890	35.399	73.851	-13.751	1.00	9.66	A
	ATOM	6976	NE2	HIS	A	890	34.210	74.339	-14.060	1.00	10.10	A
	ATOM	6977	C	HIS	A	890	37.584	73.618	-18.977	1.00	7.85	A
40	ATOM	6978	O	HIS	A	890	37.361	74.335	-19.952	1.00	8.19	A
	ATOM	6979	N	ILE	A	891	38.136	72.415	-19.079	1.00	7.06	A
	ATOM	6980	CA	ILE	A	891	38.519	71.885	-20.376	1.00	7.02	A
	ATOM	6981	CB	ILE	A	891	40.055	71.799	-20.507	1.00	6.50	A
	ATOM	6982	CG2	ILE	A	891	40.666	73.181	-20.267	1.00	9.58	A
45	ATOM	6983	CG1	ILE	A	891	40.627	70.806	-19.492	1.00	7.14	A
	ATOM	6984	CD1	ILE	A	891	42.131	70.611	-19.644	1.00	7.48	A
	ATOM	6985	C	ILE	A	891	37.886	70.523	-20.633	1.00	6.87	A
	ATOM	6986	O	ILE	A	891	37.640	69.751	-19.699	1.00	6.90	A
	ATOM	6987	N	TYR	A	892	37.619	70.244	-21.905	1.00	6.24	A
50	ATOM	6988	CA	TYR	A	892	36.982	68.996	-22.326	1.00	6.85	A
	ATOM	6989	CB	TYR	A	892	35.454	69.156	-22.391	1.00	6.74	A
	ATOM	6990	CG	TYR	A	892	34.795	69.841	-21.224	1.00	6.68	A
	ATOM	6991	CD1	TYR	A	892	34.759	71.233	-21.128	1.00	7.35	A
	ATOM	6992	CE1	TYR	A	892	34.141	71.860	-20.048	1.00	6.58	A
55	ATOM	6993	CD2	TYR	A	892	34.200	69.091	-20.214	1.00	7.90	A
	ATOM	6994	CE2	TYR	A	892	33.589	69.699	-19.136	1.00	8.12	A
	ATOM	6995	CZ	TYR	A	892	33.560	71.080	-19.054	1.00	7.15	A
	ATOM	6996	OH	TYR	A	892	32.959	71.661	-17.970	1.00	8.40	A
	ATOM	6997	C	TYR	A	892	37.395	68.586	-23.731	1.00	7.49	A

	ATOM	6998	O	TYR	A	892	38.014	69.349	-24.463	1.00	7.08	A
	ATOM	6999	N	ARG	A	893	37.038	67.355	-24.091	1.00	7.23	A
	ATOM	7000	CA	ARG	A	893	37.233	66.847	-25.449	1.00	7.84	A
	ATOM	7001	CB	ARG	A	893	38.323	65.771	-25.534	1.00	8.25	A
5	ATOM	7002	CG	ARG	A	893	39.761	66.292	-25.460	1.00	9.07	A
	ATOM	7003	CD	ARG	A	893	40.094	67.317	-26.556	1.00	8.68	A
	ATOM	7004	NE	ARG	A	893	40.144	66.752	-27.905	1.00	10.22	A
	ATOM	7005	CZ	ARG	A	893	41.105	65.951	-28.358	1.00	9.15	A
10	ATOM	7006	NH1	ARG	A	893	42.118	65.605	-27.570	1.00	11.22	A
	ATOM	7007	NH2	ARG	A	893	41.058	65.496	-29.603	1.00	12.32	A
	ATOM	7008	C	ARG	A	893	35.867	66.244	-25.776	1.00	8.20	A
	ATOM	7009	O	ARG	A	893	35.258	65.580	-24.933	1.00	8.49	A
	ATOM	7010	N	LEU	A	894	35.374	66.502	-26.984	1.00	8.73	A
15	ATOM	7011	CA	LEU	A	894	34.071	65.995	-27.402	1.00	9.10	A
	ATOM	7012	CB	LEU	A	894	33.175	67.152	-27.847	1.00	10.48	A
	ATOM	7013	CG	LEU	A	894	31.735	66.780	-28.215	1.00	11.47	A
	ATOM	7014	CD1	LEU	A	894	31.013	66.238	-26.992	1.00	12.94	A
	ATOM	7015	CD2	LEU	A	894	31.013	68.001	-28.757	1.00	12.24	A
20	ATOM	7016	C	LEU	A	894	34.275	65.019	-28.550	1.00	8.70	A
	ATOM	7017	O	LEU	A	894	34.684	65.410	-29.642	1.00	9.47	A
	ATOM	7018	N	VAL	A	895	33.977	63.749	-28.296	1.00	8.58	A
	ATOM	7019	CA	VAL	A	895	34.173	62.699	-29.284	1.00	8.99	A
	ATOM	7020	CB	VAL	A	895	35.094	61.598	-28.705	1.00	9.22	A
	ATOM	7021	CG1	VAL	A	895	35.461	60.598	-29.786	1.00	10.34	A
25	ATOM	7022	CG2	VAL	A	895	36.340	62.229	-28.102	1.00	9.86	A
	ATOM	7023	C	VAL	A	895	32.892	62.033	-29.790	1.00	10.00	A
	ATOM	7024	O	VAL	A	895	32.234	61.289	-29.057	1.00	10.19	A
	ATOM	7025	N	LEU	A	896	32.546	62.310	-31.045	1.00	10.27	A
30	ATOM	7026	CA	LEU	A	896	31.376	61.699	-31.677	1.00	10.89	A
	ATOM	7027	CB	LEU	A	896	30.666	62.688	-32.607	1.00	11.43	A
	ATOM	7028	CG	LEU	A	896	29.525	62.085	-33.436	1.00	12.15	A
	ATOM	7029	CD1	LEU	A	896	28.370	61.713	-32.528	1.00	12.66	A
	ATOM	7030	CD2	LEU	A	896	29.061	63.089	-34.479	1.00	12.63	A
35	ATOM	7031	C	LEU	A	896	31.938	60.545	-32.501	1.00	11.72	A
	ATOM	7032	O	LEU	A	896	32.880	60.731	-33.269	1.00	11.16	A
	ATOM	7033	N	GLU	A	897	31.371	59.354	-32.339	1.00	11.32	A
	ATOM	7034	CA	GLU	A	897	31.869	58.189	-33.065	1.00	13.03	A
	ATOM	7035	CB	GLU	A	897	32.844	57.397	-32.192	1.00	14.50	A
40	ATOM	7036	CG	GLU	A	897	34.027	58.161	-31.656	1.00	16.78	A
	ATOM	7037	CD	GLU	A	897	34.778	57.365	-30.601	1.00	16.72	A
	ATOM	7038	OE1	GLU	A	897	34.184	57.079	-29.539	1.00	18.39	A
	ATOM	7039	OE2	GLU	A	897	35.955	57.027	-30.838	1.00	19.39	A
	ATOM	7040	C	GLU	A	897	30.770	57.228	-33.478	1.00	12.78	A
45	ATOM	7041	O	GLU	A	897	29.699	57.192	-32.873	1.00	12.49	A
	ATOM	7042	N	LYS	A	898	31.056	56.441	-34.509	1.00	14.12	A
	ATOM	7043	CA	LYS	A	898	30.134	55.415	-34.967	1.00	15.19	A
	ATOM	7044	CB	LYS	A	898	30.283	55.175	-36.470	1.00	16.61	A
	ATOM	7045	CG	LYS	A	898	29.981	56.394	-37.328	1.00	19.37	A
50	ATOM	7046	CD	LYS	A	898	28.614	56.986	-37.004	1.00	21.68	A
	ATOM	7047	CE	LYS	A	898	27.500	55.967	-37.189	1.00	23.36	A
	ATOM	7048	NZ	LYS	A	898	26.169	56.541	-36.865	1.00	24.72	A
	ATOM	7049	C	LYS	A	898	30.596	54.186	-34.192	1.00	15.30	A
	ATOM	7050	O	LYS	A	898	31.791	53.885	-34.154	1.00	17.00	A
55	ATOM	7051	N	VAL	A	899	29.666	53.482	-33.562	1.00	14.35	A
	ATOM	7052	CA	VAL	A	899	30.038	52.318	-32.773	1.00	14.25	A

5	ATOM	7053	CB	VAL	A	899	29.804	52.590	-31.270	1.00	14.32	A
	ATOM	7054	CG1	VAL	A	899	30.809	53.622	-30.771	1.00	15.02	A
	ATOM	7055	CG2	VAL	A	899	28.386	53.096	-31.044	1.00	13.91	A
	ATOM	7056	C	VAL	A	899	29.305	51.043	-33.173	1.00	14.59	A
	ATOM	7057	O	VAL	A	899	29.321	50.056	-32.441	1.00	14.07	A
10	ATOM	7058	N	ASN	A	900	28.675	51.060	-34.341	1.00	15.09	A
	ATOM	7059	CA	ASN	A	900	27.941	49.893	-34.813	1.00	16.30	A
	ATOM	7060	CB	ASN	A	900	27.189	50.229	-36.105	1.00	17.35	A
	ATOM	7061	CG	ASN	A	900	28.098	50.780	-37.182	1.00	18.71	A
	ATOM	7062	OD1	ASN	A	900	28.719	51.830	-37.011	1.00	21.26	A
15	ATOM	7063	ND2	ASN	A	900	28.182	50.073	-38.304	1.00	20.56	A
	ATOM	7064	C	ASN	A	900	28.841	48.677	-35.041	1.00	16.24	A
	ATOM	7065	O	ASN	A	900	28.366	47.541	-35.023	1.00	16.99	A
	ATOM	7066	N	ASN	A	901	30.135	48.907	-35.243	1.00	15.40	A
	ATOM	7067	CA	ASN	A	901	31.073	47.810	-35.477	1.00	15.76	A
20	ATOM	7068	CB	ASN	A	901	32.054	48.177	-36.592	1.00	17.95	A
	ATOM	7069	CG	ASN	A	901	31.405	48.194	-37.955	1.00	20.12	A
	ATOM	7070	OD1	ASN	A	901	30.737	47.238	-38.345	1.00	22.38	A
	ATOM	7071	ND2	ASN	A	901	31.606	49.280	-38.694	1.00	21.62	A
	ATOM	7072	C	ASN	A	901	31.867	47.398	-34.246	1.00	15.11	A
25	ATOM	7073	O	ASN	A	901	32.655	46.454	-34.300	1.00	15.56	A
	ATOM	7074	N	CYS	A	902	31.667	48.100	-33.138	1.00	14.34	A
	ATOM	7075	CA	CYS	A	902	32.398	47.784	-31.916	1.00	14.62	A
	ATOM	7076	C	CYS	A	902	31.829	46.594	-31.165	1.00	13.93	A
	ATOM	7077	O	CYS	A	902	30.616	46.407	-31.101	1.00	14.93	A
30	ATOM	7078	CB	CYS	A	902	32.394	48.968	-30.954	1.00	16.27	A
	ATOM	7079	SG	CYS	A	902	33.091	50.528	-31.570	1.00	18.03	A
	ATOM	7080	N	VAL	A	903	32.717	45.798	-30.584	1.00	13.19	A
	ATOM	7081	CA	VAL	A	903	32.294	44.656	-29.789	1.00	13.49	A
	ATOM	7082	CB	VAL	A	903	33.403	43.584	-29.706	1.00	12.99	A
35	ATOM	7083	CG1	VAL	A	903	32.985	42.466	-28.755	1.00	14.69	A
	ATOM	7084	CG2	VAL	A	903	33.674	43.021	-31.095	1.00	14.28	A
	ATOM	7085	C	VAL	A	903	32.024	45.228	-28.400	1.00	13.60	A
	ATOM	7086	O	VAL	A	903	32.952	45.524	-27.646	1.00	15.18	A
	ATOM	7087	N	ARG	A	904	30.749	45.409	-28.078	1.00	13.74	A
40	ATOM	7088	CA	ARG	A	904	30.361	45.971	-26.792	1.00	13.73	A
	ATOM	7089	CB	ARG	A	904	29.311	47.066	-27.001	1.00	14.82	A
	ATOM	7090	CG	ARG	A	904	29.874	48.318	-27.644	1.00	15.86	A
	ATOM	7091	CD	ARG	A	904	28.816	49.366	-27.921	1.00	17.64	A
	ATOM	7092	NE	ARG	A	904	28.022	49.029	-29.095	1.00	18.11	A
45	ATOM	7093	CZ	ARG	A	904	27.057	49.799	-29.589	1.00	18.82	A
	ATOM	7094	NH1	ARG	A	904	26.763	50.955	-29.007	1.00	19.22	A
	ATOM	7095	NH2	ARG	A	904	26.390	49.414	-30.668	1.00	19.04	A
	ATOM	7096	C	ARG	A	904	29.814	44.929	-25.829	1.00	12.99	A
	ATOM	7097	O	ARG	A	904	29.454	43.817	-26.232	1.00	13.24	A
50	ATOM	7098	N	PRO	A	905	29.758	45.273	-24.533	1.00	12.45	A
	ATOM	7099	CD	PRO	A	905	30.305	46.482	-23.890	1.00	12.91	A
	ATOM	7100	CA	PRO	A	905	29.236	44.339	-23.533	1.00	12.91	A
	ATOM	7101	CB	PRO	A	905	29.412	45.099	-22.220	1.00	12.51	A
	ATOM	7102	CG	PRO	A	905	30.581	45.995	-22.491	1.00	12.54	A
55	ATOM	7103	C	PRO	A	905	27.764	44.086	-23.835	1.00	13.36	A
	ATOM	7104	O	PRO	A	905	27.128	44.879	-24.531	1.00	13.15	A
	ATOM	7105	N	SER	A	906	27.224	42.987	-23.318	1.00	14.23	A
	ATOM	7106	CA	SER	A	906	25.817	42.679	-23.540	1.00	16.23	A
	ATOM	7107	CB	SER	A	906	25.479	41.285	-23.014	1.00	17.70	A

5	ATOM	7108	OG	SER	A	906	25.354	41.297	-21.605	1.00	19.81	A
	ATOM	7109	C	SER	A	906	24.969	43.712	-22.808	1.00	16.91	A
	ATOM	7110	O	SER	A	906	25.478	44.485	-21.993	1.00	16.27	A
	ATOM	7111	N	LYS	A	907	23.673	43.709	-23.093	1.00	18.02	A
	ATOM	7112	CA	LYS	A	907	22.745	44.652	-22.484	1.00	19.95	A
10	ATOM	7113	CB	LYS	A	907	21.350	44.464	-23.085	1.00	22.55	A
	ATOM	7114	CG	LYS	A	907	21.266	44.784	-24.569	1.00	26.38	A
	ATOM	7115	CD	LYS	A	907	19.889	44.452	-25.136	1.00	28.71	A
	ATOM	7116	CE	LYS	A	907	18.782	45.192	-24.396	1.00	30.39	A
	ATOM	7117	NZ	LYS	A	907	18.936	46.670	-24.487	1.00	31.53	A
15	ATOM	7118	C	LYS	A	907	22.663	44.531	-20.967	1.00	18.84	A
	ATOM	7119	O	LYS	A	907	22.262	45.476	-20.287	1.00	20.33	A
	ATOM	7120	N	LEU	A	908	23.047	43.376	-20.434	1.00	17.98	A
	ATOM	7121	CA	LEU	A	908	22.982	43.159	-18.993	1.00	17.30	A
	ATOM	7122	CB	LEU	A	908	22.520	41.726	-18.704	1.00	18.78	A
20	ATOM	7123	CG	LEU	A	908	21.150	41.355	-19.284	1.00	19.88	A
	ATOM	7124	CD1	LEU	A	908	20.846	39.898	-18.980	1.00	19.94	A
	ATOM	7125	CD2	LEU	A	908	20.070	42.263	-18.701	1.00	20.79	A
	ATOM	7126	C	LEU	A	908	24.289	43.439	-18.255	1.00	15.70	A
	ATOM	7127	O	LEU	A	908	24.341	43.357	-17.028	1.00	15.90	A
25	ATOM	7128	N	HIS	A	909	25.340	43.779	-18.992	1.00	14.37	A
	ATOM	7129	CA	HIS	A	909	26.628	44.065	-18.365	1.00	12.69	A
	ATOM	7130	CB	HIS	A	909	27.737	44.014	-19.415	1.00	12.14	A
	ATOM	7131	CG	HIS	A	909	29.101	43.793	-18.842	1.00	10.96	A
	ATOM	7132	CD2	HIS	A	909	29.934	42.728	-18.912	1.00	11.76	A
30	ATOM	7133	ND1	HIS	A	909	29.752	44.739	-18.079	1.00	10.65	A
	ATOM	7134	CE1	HIS	A	909	30.928	44.265	-17.706	1.00	11.60	A
	ATOM	7135	NE2	HIS	A	909	31.063	43.047	-18.199	1.00	11.85	A
	ATOM	7136	C	HIS	A	909	26.572	45.446	-17.704	1.00	11.79	A
	ATOM	7137	O	HIS	A	909	26.102	46.410	-18.304	1.00	12.37	A
35	ATOM	7138	N	PRO	A	910	27.053	45.558	-16.455	1.00	10.34	A
	ATOM	7139	CD	PRO	A	910	27.391	44.457	-15.540	1.00	11.26	A
	ATOM	7140	CA	PRO	A	910	27.037	46.837	-15.734	1.00	10.21	A
	ATOM	7141	CB	PRO	A	910	27.184	46.421	-14.268	1.00	10.93	A
	ATOM	7142	CG	PRO	A	910	26.839	44.971	-14.242	1.00	11.48	A
40	ATOM	7143	C	PRO	A	910	28.118	47.848	-16.116	1.00	9.86	A
	ATOM	7144	O	PRO	A	910	28.100	48.980	-15.631	1.00	9.94	A
	ATOM	7145	N	ALA	A	911	29.061	47.442	-16.957	1.00	9.55	A
	ATOM	7146	CA	ALA	A	911	30.138	48.342	-17.342	1.00	9.81	A
	ATOM	7147	CB	ALA	A	911	31.482	47.684	-17.070	1.00	9.39	A
45	ATOM	7148	C	ALA	A	911	30.088	48.800	-18.786	1.00	9.68	A
	ATOM	7149	O	ALA	A	911	29.354	48.253	-19.614	1.00	10.29	A
	ATOM	7150	N	GLY	A	912	30.893	49.818	-19.064	1.00	9.71	A
	ATOM	7151	CA	GLY	A	912	31.022	50.367	-20.397	1.00	9.40	A
	ATOM	7152	C	GLY	A	912	32.504	50.627	-20.589	1.00	9.56	A
50	ATOM	7153	O	GLY	A	912	33.244	50.718	-19.607	1.00	9.93	A
	ATOM	7154	N	TYR	A	913	32.943	50.749	-21.838	1.00	9.13	A
	ATOM	7155	CA	TYR	A	913	34.351	50.986	-22.132	1.00	9.27	A
	ATOM	7156	CB	TYR	A	913	35.042	49.682	-22.547	1.00	8.76	A
	ATOM	7157	CG	TYR	A	913	35.014	48.632	-21.470	1.00	8.89	A
55	ATOM	7158	CD1	TYR	A	913	34.036	47.641	-21.460	1.00	10.18	A
	ATOM	7159	CE1	TYR	A	913	33.962	46.719	-20.423	1.00	10.05	A
	ATOM	7160	CD2	TYR	A	913	35.923	48.674	-20.418	1.00	9.62	A
	ATOM	7161	CE2	TYR	A	913	35.858	47.764	-19.376	1.00	9.58	A
	ATOM	7162	CZ	TYR	A	913	34.875	46.790	-19.383	1.00	10.29	A

5	ATOM	7163	OH	TYR	A	913	34.789	45.897	-18.341	1.00	10.44	A
	ATOM	7164	C	TYR	A	913	34.548	52.013	-23.230	1.00	9.23	A
	ATOM	7165	O	TYR	A	913	33.759	52.093	-24.173	1.00	9.94	A
	ATOM	7166	N	LEU	A	914	35.617	52.790	-23.101	1.00	9.01	A
	ATOM	7167	CA	LEU	A	914	35.946	53.811	-24.082	1.00	8.49	A
10	ATOM	7168	CB	LEU	A	914	36.951	54.809	-23.507	1.00	8.20	A
	ATOM	7169	CG	LEU	A	914	36.543	55.679	-22.326	1.00	8.55	A
	ATOM	7170	CD1	LEU	A	914	37.659	56.679	-22.057	1.00	8.59	A
	ATOM	7171	CD2	LEU	A	914	35.240	56.408	-22.635	1.00	8.59	A
	ATOM	7172	C	LEU	A	914	36.568	53.215	-25.332	1.00	8.86	A
15	ATOM	7173	O	LEU	A	914	37.033	52.075	-25.337	1.00	9.04	A
	ATOM	7174	N	THR	A	915	36.570	54.021	-26.387	1.00	9.49	A
	ATOM	7175	CA	THR	A	915	37.187	53.656	-27.647	1.00	10.01	A
	ATOM	7176	CB	THR	A	915	36.498	54.345	-28.831	1.00	11.05	A
	ATOM	7177	OG1	THR	A	915	36.474	55.758	-28.590	1.00	12.54	A
20	ATOM	7178	CG2	THR	A	915	35.080	53.833	-29.011	1.00	12.14	A
	ATOM	7179	C	THR	A	915	38.593	54.237	-27.542	1.00	10.47	A
	ATOM	7180	O	THR	A	915	38.879	55.037	-26.641	1.00	10.28	A
	ATOM	7181	N	SER	A	916	39.464	53.853	-28.465	1.00	11.05	A
	ATOM	7182	CA	SER	A	916	40.828	54.357	-28.482	1.00	11.00	A
25	ATOM	7183	CB	SER	A	916	41.574	53.795	-29.690	1.00	12.42	A
	ATOM	7184	OG	SER	A	916	42.793	54.485	-29.888	1.00	16.48	A
	ATOM	7185	C	SER	A	916	40.857	55.881	-28.539	1.00	10.98	A
	ATOM	7186	O	SER	A	916	41.572	56.528	-27.776	1.00	10.02	A
	ATOM	7187	N	ALA	A	917	40.069	56.455	-29.442	1.00	10.04	A
30	ATOM	7188	CA	ALA	A	917	40.040	57.903	-29.593	1.00	9.89	A
	ATOM	7189	CB	ALA	A	917	39.119	58.292	-30.738	1.00	10.71	A
	ATOM	7190	C	ALA	A	917	39.612	58.621	-28.319	1.00	9.48	A
	ATOM	7191	O	ALA	A	917	40.199	59.638	-27.950	1.00	9.99	A
	ATOM	7192	N	ALA	A	918	38.592	58.099	-27.644	1.00	9.40	A
35	ATOM	7193	CA	ALA	A	918	38.110	58.736	-26.420	1.00	8.86	A
	ATOM	7194	CB	ALA	A	918	36.788	58.114	-25.988	1.00	9.92	A
	ATOM	7195	C	ALA	A	918	39.141	58.627	-25.300	1.00	8.91	A
	ATOM	7196	O	ALA	A	918	39.331	59.569	-24.524	1.00	7.94	A
	ATOM	7197	N	HIS	A	919	39.799	57.477	-25.210	1.00	8.73	A
40	ATOM	7198	CA	HIS	A	919	40.818	57.279	-24.189	1.00	8.75	A
	ATOM	7199	CB	HIS	A	919	41.320	55.833	-24.211	1.00	9.47	A
	ATOM	7200	CG	HIS	A	919	42.438	55.570	-23.249	1.00	10.68	A
	ATOM	7201	CD2	HIS	A	919	42.499	55.686	-21.901	1.00	12.48	A
	ATOM	7202	ND1	HIS	A	919	43.689	55.158	-23.656	1.00	13.04	A
45	ATOM	7203	CE1	HIS	A	919	44.473	55.032	-22.599	1.00	12.08	A
	ATOM	7204	NE2	HIS	A	919	43.776	55.346	-21.523	1.00	13.28	A
	ATOM	7205	C	HIS	A	919	41.979	58.239	-24.430	1.00	8.59	A
	ATOM	7206	O	HIS	A	919	42.459	58.892	-23.503	1.00	8.31	A
	ATOM	7207	N	LYS	A	920	42.429	58.341	-25.675	1.00	7.96	A
50	ATOM	7208	CA	LYS	A	920	43.528	59.250	-25.969	1.00	9.08	A
	ATOM	7209	CB	LYS	A	920	44.009	59.077	-27.411	1.00	10.76	A
	ATOM	7210	CG	LYS	A	920	44.880	57.833	-27.582	1.00	13.02	A
	ATOM	7211	CD	LYS	A	920	45.559	57.777	-28.938	1.00	14.64	A
	ATOM	7212	CE	LYS	A	920	46.493	56.579	-29.030	1.00	15.02	A
55	ATOM	7213	NZ	LYS	A	920	47.658	56.686	-28.103	1.00	15.98	A
	ATOM	7214	C	LYS	A	920	43.116	60.694	-25.701	1.00	8.52	A
	ATOM	7215	O	LYS	A	920	43.928	61.496	-25.236	1.00	8.56	A
	ATOM	7216	N	ALA	A	921	41.855	61.024	-25.972	1.00	8.30	A
	ATOM	7217	CA	ALA	A	921	41.372	62.380	-25.729	1.00	8.01	A

	ATOM	7218	CB	ALA	A	921	39.947	62.540	-26.263	1.00	7.47	A
	ATOM	7219	C	ALA	A	921	41.421	62.667	-24.227	1.00	7.72	A
	ATOM	7220	O	ALA	A	921	41.770	63.772	-23.801	1.00	8.39	A
5	ATOM	7221	N	SER	A	922	41.076	61.670	-23.417	1.00	7.17	A
	ATOM	7222	CA	SER	A	922	41.120	61.854	-21.969	1.00	7.27	A
	ATOM	7223	CB	SER	A	922	40.549	60.627	-21.251	1.00	7.70	A
	ATOM	7224	OG	SER	A	922	40.649	60.781	-19.841	1.00	7.96	A
	ATOM	7225	C	SER	A	922	42.565	62.083	-21.532	1.00	7.89	A
10	ATOM	7226	O	SER	A	922	42.839	62.944	-20.698	1.00	8.87	A
	ATOM	7227	N	GLN	A	923	43.494	61.321	-22.104	1.00	8.46	A
	ATOM	7228	CA	GLN	A	923	44.904	61.476	-21.760	1.00	8.76	A
	ATOM	7229	CB	GLN	A	923	45.744	60.379	-22.423	1.00	8.95	A
	ATOM	7230	CG	GLN	A	923	45.466	58.979	-21.895	1.00	8.79	A
15	ATOM	7231	CD	GLN	A	923	46.396	57.936	-22.495	1.00	10.09	A
	ATOM	7232	OE1	GLN	A	923	46.537	57.847	-23.715	1.00	11.44	A
	ATOM	7233	NE2	GLN	A	923	47.028	57.133	-21.635	1.00	9.11	A
	ATOM	7234	C	GLN	A	923	45.435	62.849	-22.163	1.00	9.21	A
	ATOM	7235	O	GLN	A	923	46.318	63.396	-21.501	1.00	9.10	A
20	ATOM	7236	N	SER	A	924	44.886	63.417	-23.236	1.00	8.93	A
	ATOM	7237	CA	SER	A	924	45.333	64.729	-23.703	1.00	9.54	A
	ATOM	7238	CB	SER	A	924	44.733	65.048	-25.081	1.00	10.43	A
	ATOM	7239	OG	SER	A	924	43.373	65.457	-24.987	1.00	11.08	A
	ATOM	7240	C	SER	A	924	44.941	65.819	-22.709	1.00	9.66	A
25	ATOM	7241	O	SER	A	924	45.572	66.874	-22.648	1.00	10.68	A
	ATOM	7242	N	LEU	A	925	43.898	65.554	-21.931	1.00	9.32	A
	ATOM	7243	CA	LEU	A	925	43.412	66.508	-20.941	1.00	8.62	A
	ATOM	7244	CB	LEU	A	925	41.904	66.335	-20.738	1.00	8.40	A
	ATOM	7245	CG	LEU	A	925	40.991	66.609	-21.938	1.00	7.47	A
30	ATOM	7246	CD1	LEU	A	925	39.556	66.255	-21.569	1.00	8.87	A
	ATOM	7247	CD2	LEU	A	925	41.094	68.077	-22.349	1.00	8.87	A
	ATOM	7248	C	LEU	A	925	44.106	66.351	-19.593	1.00	9.08	A
	ATOM	7249	O	LEU	A	925	44.532	67.333	-18.984	1.00	9.69	A
	ATOM	7250	N	LEU	A	926	44.236	65.110	-19.141	1.00	8.72	A
35	ATOM	7251	CA	LEU	A	926	44.837	64.834	-17.842	1.00	8.73	A
	ATOM	7252	CB	LEU	A	926	44.287	63.518	-17.291	1.00	9.50	A
	ATOM	7253	CG	LEU	A	926	42.771	63.509	-17.070	1.00	10.76	A
	ATOM	7254	CD1	LEU	A	926	42.339	62.149	-16.537	1.00	11.48	A
	ATOM	7255	CD2	LEU	A	926	42.388	64.618	-16.095	1.00	12.65	A
40	ATOM	7256	C	LEU	A	926	46.356	64.804	-17.790	1.00	8.63	A
	ATOM	7257	O	LEU	A	926	46.946	65.189	-16.783	1.00	8.46	A
	ATOM	7258	N	ASP	A	927	46.989	64.340	-18.861	1.00	7.51	A
	ATOM	7259	CA	ASP	A	927	48.444	64.262	-18.891	1.00	8.28	A
	ATOM	7260	CB	ASP	A	927	48.891	62.819	-18.644	1.00	7.75	A
45	ATOM	7261	CG	ASP	A	927	48.570	62.350	-17.234	1.00	8.29	A
	ATOM	7262	OD1	ASP	A	927	49.295	62.740	-16.293	1.00	8.68	A
	ATOM	7263	OD2	ASP	A	927	47.580	61.609	-17.067	1.00	9.56	A
	ATOM	7264	C	ASP	A	927	49.008	64.787	-20.204	1.00	8.04	A
	ATOM	7265	O	ASP	A	927	49.595	64.049	-20.995	1.00	7.83	A
50	ATOM	7266	N	PRO	A	928	48.830	66.088	-20.452	1.00	8.56	A
	ATOM	7267	CD	PRO	A	928	48.226	67.103	-19.569	1.00	9.25	A
	ATOM	7268	CA	PRO	A	928	49.334	66.697	-21.683	1.00	8.71	A
	ATOM	7269	CB	PRO	A	928	48.708	68.088	-21.649	1.00	9.22	A
	ATOM	7270	CG	PRO	A	928	48.717	68.403	-20.190	1.00	10.86	A
	ATOM	7271	C	PRO	A	928	50.855	66.770	-21.665	1.00	8.77	A
55	ATOM	7272	O	PRO	A	928	51.492	66.449	-20.661	1.00	9.15	A

5	ATOM	7273	N	LEU	A	929	51.446	67.178	-22.778	1.00	8.33	A
	ATOM	7274	CA	LEU	A	929	52.891	67.338	-22.810	1.00	7.61	A
	ATOM	7275	CB	LEU	A	929	53.368	67.690	-24.221	1.00	8.02	A
	ATOM	7276	CG	LEU	A	929	53.200	66.682	-25.351	1.00	8.18	A
	ATOM	7277	CD1	LEU	A	929	53.766	67.292	-26.632	1.00	8.11	A
10	ATOM	7278	CD2	LEU	A	929	53.934	65.391	-25.012	1.00	7.77	A
	ATOM	7279	C	LEU	A	929	53.234	68.505	-21.887	1.00	8.11	A
	ATOM	7280	O	LEU	A	929	52.452	69.445	-21.748	1.00	9.64	A
	ATOM	7281	N	ASP	A	930	54.394	68.441	-21.248	1.00	7.51	A
	ATOM	7282	CA	ASP	A	930	54.841	69.534	-20.390	1.00	7.84	A
15	ATOM	7283	CB	ASP	A	930	55.582	68.979	-19.182	1.00	8.72	A
	ATOM	7284	CG	ASP	A	930	54.742	68.005	-18.411	1.00	9.94	A
	ATOM	7285	OD1	ASP	A	930	53.688	68.437	-17.903	1.00	12.39	A
	ATOM	7286	OD2	ASP	A	930	55.121	66.818	-18.334	1.00	9.76	A
	ATOM	7287	C	ASP	A	930	55.767	70.394	-21.237	1.00	8.70	A
20	ATOM	7288	O	ASP	A	930	56.531	69.870	-22.055	1.00	9.26	A
	ATOM	7289	N	LYS	A	931	55.702	71.705	-21.047	1.00	8.39	A
	ATOM	7290	CA	LYS	A	931	56.517	72.627	-21.831	1.00	8.99	A
	ATOM	7291	CB	LYS	A	931	55.605	73.584	-22.605	1.00	10.48	A
	ATOM	7292	CG	LYS	A	931	54.622	72.897	-23.547	1.00	11.73	A
25	ATOM	7293	CD	LYS	A	931	53.708	73.912	-24.221	1.00	14.44	A
	ATOM	7294	CE	LYS	A	931	52.828	74.625	-23.206	1.00	16.26	A
	ATOM	7295	NZ	LYS	A	931	52.017	75.703	-23.824	1.00	16.66	A
	ATOM	7296	C	LYS	A	931	57.479	73.425	-20.963	1.00	9.43	A
	ATOM	7297	O	LYS	A	931	57.081	74.021	-19.959	1.00	9.83	A
30	ATOM	7298	N	PHE	A	932	58.747	73.439	-21.362	1.00	8.58	A
	ATOM	7299	CA	PHE	A	932	59.781	74.160	-20.633	1.00	8.60	A
	ATOM	7300	CB	PHE	A	932	60.852	73.191	-20.124	1.00	8.76	A
	ATOM	7301	CG	PHE	A	932	60.326	72.107	-19.229	1.00	9.77	A
	ATOM	7302	CD1	PHE	A	932	59.725	70.970	-19.760	1.00	10.21	A
35	ATOM	7303	CD2	PHE	A	932	60.450	72.216	-17.849	1.00	10.48	A
	ATOM	7304	CE1	PHE	A	932	59.259	69.952	-18.926	1.00	10.04	A
	ATOM	7305	CE2	PHE	A	932	59.986	71.205	-17.004	1.00	10.11	A
	ATOM	7306	CZ	PHE	A	932	59.391	70.073	-17.545	1.00	10.61	A
	ATOM	7307	C	PHE	A	932	60.451	75.194	-21.530	1.00	9.09	A
40	ATOM	7308	O	PHE	A	932	60.755	74.910	-22.684	1.00	9.97	A
	ATOM	7309	N	ILE	A	933	60.674	76.389	-20.993	1.00	9.13	A
	ATOM	7310	CA	ILE	A	933	61.331	77.462	-21.739	1.00	9.38	A
	ATOM	7311	CB	ILE	A	933	60.531	78.783	-21.666	1.00	9.33	A
	ATOM	7312	CG2	ILE	A	933	61.247	79.868	-22.472	1.00	9.12	A
45	ATOM	7313	CG1	ILE	A	933	59.108	78.578	-22.194	1.00	9.64	A
	ATOM	7314	CD1	ILE	A	933	58.197	79.778	-21.970	1.00	9.86	A
	ATOM	7315	C	ILE	A	933	62.685	77.704	-21.080	1.00	10.17	A
	ATOM	7316	O	ILE	A	933	62.743	78.009	-19.888	1.00	9.98	A
	ATOM	7317	N	PHE	A	934	63.772	77.564	-21.836	1.00	9.94	A
50	ATOM	7318	CA	PHE	A	934	65.094	77.789	-21.258	1.00	11.19	A
	ATOM	7319	CB	PHE	A	934	66.193	77.479	-22.278	1.00	11.54	A
	ATOM	7320	CG	PHE	A	934	67.570	77.438	-21.682	1.00	12.50	A
	ATOM	7321	CD1	PHE	A	934	67.947	76.400	-20.835	1.00	13.12	A
	ATOM	7322	CD2	PHE	A	934	68.486	78.449	-21.949	1.00	13.26	A
55	ATOM	7323	CE1	PHE	A	934	69.216	76.371	-20.263	1.00	14.59	A
	ATOM	7324	CE2	PHE	A	934	69.754	78.432	-21.385	1.00	14.88	A
	ATOM	7325	CZ	PHE	A	934	70.122	77.392	-20.539	1.00	15.40	A
	ATOM	7326	C	PHE	A	934	65.182	79.247	-20.800	1.00	12.24	A
	ATOM	7327	O	PHE	A	934	64.892	80.165	-21.563	1.00	11.22	A

5	ATOM	7328	N	ALA	A	935	65.586	79.453	-19.552	1.00	13.19	A
	ATOM	7329	CA	ALA	A	935	65.662	80.799	-18.987	1.00	14.58	A
	ATOM	7330	CB	ALA	A	935	65.718	80.710	-17.466	1.00	15.65	A
	ATOM	7331	C	ALA	A	935	66.808	81.675	-19.492	1.00	16.26	A
	ATOM	7332	O	ALA	A	935	66.590	82.825	-19.891	1.00	17.74	A
10	ATOM	7333	N	GLU	A	936	68.022	81.136	-19.467	1.00	16.39	A
	ATOM	7334	CA	GLU	A	936	69.211	81.867	-19.898	1.00	17.74	A
	ATOM	7335	CB	GLU	A	936	70.467	81.103	-19.468	1.00	20.01	A
	ATOM	7336	CG	GLU	A	936	70.634	80.978	-17.957	1.00	22.92	A
	ATOM	7337	CD	GLU	A	936	71.701	79.965	-17.566	1.00	24.26	A
15	ATOM	7338	OE1	GLU	A	936	71.485	78.753	-17.782	1.00	25.07	A
	ATOM	7339	OE2	GLU	A	936	72.757	80.381	-17.048	1.00	25.95	A
	ATOM	7340	C	GLU	A	936	69.246	82.112	-21.404	1.00	17.36	A
	ATOM	7341	O	GLU	A	936	68.448	81.555	-22.154	1.00	16.51	A
	ATOM	7342	N	ASN	A	937	70.182	82.945	-21.847	1.00	17.29	A
20	ATOM	7343	CA	ASN	A	937	70.292	83.249	-23.267	1.00	17.24	A
	ATOM	7344	CB	ASN	A	937	71.132	84.511	-23.481	1.00	17.86	A
	ATOM	7345	CG	ASN	A	937	70.445	85.756	-22.963	1.00	19.51	A
	ATOM	7346	OD1	ASN	A	937	69.224	85.891	-23.065	1.00	19.45	A
	ATOM	7347	ND2	ASN	A	937	71.224	86.680	-22.415	1.00	20.71	A
25	ATOM	7348	C	ASN	A	937	70.872	82.104	-24.083	1.00	17.18	A
	ATOM	7349	O	ASN	A	937	70.477	81.897	-25.231	1.00	17.44	A
	ATOM	7350	N	GLU	A	938	71.808	81.362	-23.498	1.00	17.86	A
	ATOM	7351	CA	GLU	A	938	72.420	80.242	-24.200	1.00	18.98	A
	ATOM	7352	CB	GLU	A	938	73.815	80.620	-24.706	1.00	21.93	A
30	ATOM	7353	CG	GLU	A	938	74.555	79.461	-25.356	1.00	25.69	A
	ATOM	7354	CD	GLU	A	938	75.752	79.905	-26.169	1.00	27.97	A
	ATOM	7355	OE1	GLU	A	938	76.636	80.591	-25.613	1.00	29.35	A
	ATOM	7356	OE2	GLU	A	938	75.809	79.563	-27.369	1.00	29.44	A
	ATOM	7357	C	GLU	A	938	72.512	78.991	-23.337	1.00	17.94	A
35	ATOM	7358	O	GLU	A	938	72.883	79.055	-22.167	1.00	17.89	A
	ATOM	7359	N	TRP	A	939	72.172	77.855	-23.935	1.00	17.52	A
	ATOM	7360	CA	TRP	A	939	72.205	76.566	-23.254	1.00	16.76	A
	ATOM	7361	CB	TRP	A	939	70.869	75.847	-23.479	1.00	15.33	A
	ATOM	7362	CG	TRP	A	939	70.741	74.489	-22.850	1.00	13.31	A
40	ATOM	7363	CD2	TRP	A	939	69.654	73.575	-23.030	1.00	12.28	A
	ATOM	7364	CE2	TRP	A	939	69.933	72.431	-22.250	1.00	12.13	A
	ATOM	7365	CE3	TRP	A	939	68.469	73.613	-23.776	1.00	11.44	A
	ATOM	7366	CD1	TRP	A	939	71.615	73.882	-21.991	1.00	13.47	A
	ATOM	7367	NE1	TRP	A	939	71.135	72.644	-21.627	1.00	12.39	A
45	ATOM	7368	CZ2	TRP	A	939	69.068	71.332	-22.196	1.00	11.94	A
	ATOM	7369	CZ3	TRP	A	939	67.609	72.521	-23.723	1.00	11.55	A
	ATOM	7370	CH2	TRP	A	939	67.915	71.395	-22.938	1.00	12.10	A
	ATOM	7371	C	TRP	A	939	73.362	75.744	-23.814	1.00	17.70	A
	ATOM	7372	O	TRP	A	939	73.224	75.072	-24.836	1.00	18.81	A
50	ATOM	7373	N	ILE	A	940	74.509	75.815	-23.144	1.00	18.72	A
	ATOM	7374	CA	ILE	A	940	75.690	75.082	-23.583	1.00	19.32	A
	ATOM	7375	CB	ILE	A	940	76.958	75.609	-22.879	1.00	20.59	A
	ATOM	7376	CG2	ILE	A	940	78.178	74.816	-23.335	1.00	21.55	A
	ATOM	7377	CG1	ILE	A	940	77.143	77.095	-23.194	1.00	21.42	A
55	ATOM	7378	CD1	ILE	A	940	78.336	77.729	-22.506	1.00	22.42	A
	ATOM	7379	C	ILE	A	940	75.553	73.587	-23.302	1.00	18.18	A
	ATOM	7380	O	ILE	A	940	75.154	73.187	-22.209	1.00	18.75	A
	ATOM	7381	N	GLY	A	941	75.880	72.769	-24.298	1.00	17.98	A
	ATOM	7382	CA	GLY	A	941	75.795	71.327	-24.131	1.00	16.47	A

	ATOM	7383	C	GLY	A	941	74.396	70.764	-24.300	1.00	16.11	A
	ATOM	7384	O	GLY	A	941	74.140	69.610	-23.953	1.00	14.65	A
	ATOM	7385	N	ALA	A	942	73.490	71.572	-24.839	1.00	15.44	A
5	ATOM	7386	CA	ALA	A	942	72.112	71.147	-25.047	1.00	15.43	A
	ATOM	7387	CB	ALA	A	942	71.295	72.300	-25.618	1.00	15.09	A
	ATOM	7388	C	ALA	A	942	72.002	69.934	-25.967	1.00	15.86	A
	ATOM	7389	O	ALA	A	942	72.715	69.829	-26.964	1.00	16.24	A
	ATOM	7390	N	GLN	A	943	71.098	69.022	-25.619	1.00	15.50	A
10	ATOM	7391	CA	GLN	A	943	70.853	67.822	-26.410	1.00	15.78	A
	ATOM	7392	CB	GLN	A	943	71.049	66.571	-25.553	1.00	16.41	A
	ATOM	7393	CG	GLN	A	943	72.424	66.493	-24.914	1.00	19.58	A
	ATOM	7394	CD	GLN	A	943	72.627	65.219	-24.123	1.00	20.93	A
	ATOM	7395	OE1	GLN	A	943	71.773	64.829	-23.326	1.00	22.95	A
15	ATOM	7396	NE2	GLN	A	943	73.764	64.565	-24.333	1.00	22.03	A
	ATOM	7397	C	GLN	A	943	69.422	67.898	-26.934	1.00	15.16	A
	ATOM	7398	O	GLN	A	943	68.554	68.504	-26.302	1.00	14.93	A
	ATOM	7399	N	GLY	A	944	69.171	67.277	-28.080	1.00	14.52	A
	ATOM	7400	CA	GLY	A	944	67.853	67.358	-28.677	1.00	14.66	A
20	ATOM	7401	C	GLY	A	944	66.789	66.373	-28.261	1.00	14.61	A
	ATOM	7402	O	GLY	A	944	65.615	66.576	-28.569	1.00	14.40	A
	ATOM	7403	N	GLN	A	945	67.169	65.318	-27.551	1.00	14.07	A
	ATOM	7404	CA	GLN	A	945	66.180	64.328	-27.168	1.00	14.57	A
	ATOM	7405	CB	GLN	A	945	65.814	63.516	-28.412	1.00	15.05	A
25	ATOM	7406	CG	GLN	A	945	64.863	62.360	-28.204	1.00	17.81	A
	ATOM	7407	CD	GLN	A	945	64.575	61.630	-29.503	1.00	18.96	A
	ATOM	7408	OE1	GLN	A	945	63.803	62.104	-30.341	1.00	21.23	A
	ATOM	7409	NE2	GLN	A	945	65.208	60.480	-29.684	1.00	20.13	A
	ATOM	7410	C	GLN	A	945	66.620	63.394	-26.049	1.00	13.74	A
30	ATOM	7411	O	GLN	A	945	67.812	63.171	-25.838	1.00	14.42	A
	ATOM	7412	N	PHE	A	946	65.637	62.874	-25.320	1.00	12.42	A
	ATOM	7413	CA	PHE	A	946	65.871	61.913	-24.249	1.00	11.92	A
	ATOM	7414	CB	PHE	A	946	65.816	62.565	-22.866	1.00	11.65	A
	ATOM	7415	CG	PHE	A	946	65.710	61.567	-21.742	1.00	11.33	A
35	ATOM	7416	CD1	PHE	A	946	66.766	60.708	-21.455	1.00	11.76	A
	ATOM	7417	CD2	PHE	A	946	64.532	61.447	-21.013	1.00	11.56	A
	ATOM	7418	CE1	PHE	A	946	66.648	59.735	-20.456	1.00	12.23	A
	ATOM	7419	CE2	PHE	A	946	64.402	60.481	-20.016	1.00	11.37	A
	ATOM	7420	CZ	PHE	A	946	65.463	59.623	-19.738	1.00	11.69	A
40	ATOM	7421	C	PHE	A	946	64.765	60.872	-24.338	1.00	11.81	A
	ATOM	7422	O	PHE	A	946	63.599	61.216	-24.522	1.00	11.13	A
	ATOM	7423	N	GLY	A	947	65.134	59.600	-24.222	1.00	11.32	A
	ATOM	7424	CA	GLY	A	947	64.146	58.536	-24.270	1.00	12.34	A
	ATOM	7425	C	GLY	A	947	63.815	57.963	-25.631	1.00	12.93	A
45	ATOM	7426	O	GLY	A	947	62.848	57.213	-25.763	1.00	12.03	A
	ATOM	7427	N	GLY	A	948	64.604	58.306	-26.644	1.00	14.12	A
	ATOM	7428	CA	GLY	A	948	64.346	57.786	-27.973	1.00	15.63	A
	ATOM	7429	C	GLY	A	948	64.401	56.271	-28.021	1.00	17.10	A
	ATOM	7430	O	GLY	A	948	63.854	55.652	-28.934	1.00	18.33	A
50	ATOM	7431	N	ASP	A	949	65.055	55.671	-27.033	1.00	18.00	A
	ATOM	7432	CA	ASP	A	949	65.183	54.222	-26.973	1.00	18.53	A
	ATOM	7433	CB	ASP	A	949	66.614	53.841	-26.570	1.00	20.30	A
	ATOM	7434	CG	ASP	A	949	66.955	54.263	-25.154	1.00	22.70	A
	ATOM	7435	OD1	ASP	A	949	66.613	55.400	-24.764	1.00	24.14	A
	ATOM	7436	OD2	ASP	A	949	67.577	53.458	-24.430	1.00	25.19	A
55	ATOM	7437	C	ASP	A	949	64.179	53.573	-26.019	1.00	17.78	A

5	ATOM	7438	O	ASP	A	949	64.194	52.356	-25.834	1.00	18.75	A
	ATOM	7439	N	HIS	A	950	63.310	54.380	-25.411	1.00	16.45	A
	ATOM	7440	CA	HIS	A	950	62.297	53.841	-24.503	1.00	14.81	A
	ATOM	7441	CB	HIS	A	950	61.548	54.952	-23.758	1.00	13.22	A
	ATOM	7442	CG	HIS	A	950	62.378	55.720	-22.778	1.00	12.93	A
	ATOM	7443	CD2	HIS	A	950	62.106	56.855	-22.095	1.00	10.00	A
	ATOM	7444	ND1	HIS	A	950	63.630	55.316	-22.365	1.00	13.22	A
	ATOM	7445	CE1	HIS	A	950	64.091	56.172	-21.469	1.00	10.93	A
10	ATOM	7446	NE2	HIS	A	950	63.185	57.115	-21.287	1.00	13.26	A
	ATOM	7447	C	HIS	A	950	61.263	53.076	-25.326	1.00	14.43	A
	ATOM	7448	O	HIS	A	950	60.886	53.508	-26.414	1.00	15.25	A
	ATOM	7449	N	PRO	A	951	60.788	51.931	-24.818	1.00	15.24	A
15	ATOM	7450	CD	PRO	A	951	61.323	51.140	-23.696	1.00	16.21	A
	ATOM	7451	CA	PRO	A	951	59.788	51.164	-25.566	1.00	14.93	A
	ATOM	7452	CB	PRO	A	951	59.614	49.906	-24.715	1.00	16.19	A
	ATOM	7453	CG	PRO	A	951	60.975	49.727	-24.112	1.00	16.73	A
	ATOM	7454	C	PRO	A	951	58.484	51.952	-25.692	1.00	14.35	A
20	ATOM	7455	O	PRO	A	951	58.084	52.657	-24.762	1.00	14.20	A
	ATOM	7456	N	SER	A	952	57.832	51.849	-26.845	1.00	13.71	A
	ATOM	7457	CA	SER	A	952	56.566	52.538	-27.064	1.00	13.35	A
	ATOM	7458	CB	SER	A	952	56.500	53.103	-28.484	1.00	13.35	A
	ATOM	7459	OG	SER	A	952	55.421	54.013	-28.630	1.00	14.37	A
	ATOM	7460	C	SER	A	952	55.489	51.482	-26.851	1.00	13.53	A
25	ATOM	7461	O	SER	A	952	55.179	50.696	-27.752	1.00	13.71	A
	ATOM	7462	N	ALA	A	953	54.933	51.473	-25.643	1.00	13.61	A
	ATOM	7463	CA	ALA	A	953	53.924	50.504	-25.236	1.00	13.14	A
	ATOM	7464	CB	ALA	A	953	53.755	50.556	-23.719	1.00	13.24	A
30	ATOM	7465	C	ALA	A	953	52.562	50.619	-25.902	1.00	13.16	A
	ATOM	7466	O	ALA	A	953	52.190	51.671	-26.421	1.00	12.81	A
	ATOM	7467	N	ARG	A	954	51.824	49.511	-25.877	1.00	13.06	A
	ATOM	7468	CA	ARG	A	954	50.486	49.452	-26.446	1.00	14.74	A
	ATOM	7469	CB	ARG	A	954	49.857	48.094	-26.142	1.00	18.83	A
35	ATOM	7470	CG	ARG	A	954	48.477	47.891	-26.737	1.00	25.14	A
	ATOM	7471	CD	ARG	A	954	48.371	46.517	-27.377	1.00	30.81	A
	ATOM	7472	NE	ARG	A	954	46.988	46.066	-27.486	1.00	35.73	A
	ATOM	7473	CZ	ARG	A	954	46.241	45.713	-26.447	1.00	38.06	A
	ATOM	7474	NH1	ARG	A	954	46.748	45.760	-25.224	1.00	39.95	A
40	ATOM	7475	NH2	ARG	A	954	44.990	45.309	-26.628	1.00	39.73	A
	ATOM	7476	C	ARG	A	954	49.658	50.583	-25.837	1.00	12.99	A
	ATOM	7477	O	ARG	A	954	49.792	50.893	-24.651	1.00	12.00	A
	ATOM	7478	N	GLU	A	955	48.792	51.178	-26.652	1.00	12.43	A
	ATOM	7479	CA	GLU	A	955	47.979	52.320	-26.241	1.00	12.31	A
45	ATOM	7480	CB	GLU	A	955	47.073	52.751	-27.400	1.00	13.73	A
	ATOM	7481	CG	GLU	A	955	45.904	51.825	-27.665	1.00	16.19	A
	ATOM	7482	CD	GLU	A	955	45.042	52.303	-28.814	1.00	17.59	A
	ATOM	7483	OE1	GLU	A	955	44.870	53.531	-28.958	1.00	20.32	A
	ATOM	7484	OE2	GLU	A	955	44.528	51.454	-29.567	1.00	19.35	A
50	ATOM	7485	C	GLU	A	955	47.140	52.203	-24.970	1.00	11.08	A
	ATOM	7486	O	GLU	A	955	46.859	53.216	-24.326	1.00	10.87	A
	ATOM	7487	N	ASP	A	956	46.734	50.992	-24.602	1.00	10.57	A
	ATOM	7488	CA	ASP	A	956	45.919	50.829	-23.403	1.00	11.30	A
	ATOM	7489	CB	ASP	A	956	44.937	49.656	-23.567	1.00	12.11	A
55	ATOM	7490	CG	ASP	A	956	45.624	48.339	-23.887	1.00	13.69	A
	ATOM	7491	OD1	ASP	A	956	46.860	48.317	-24.078	1.00	14.76	A
	ATOM	7492	OD2	ASP	A	956	44.909	47.313	-23.949	1.00	15.09	A

5	ATOM	7493	C	ASP	A	956	46.731	50.665	-22.124	1.00	10.25	A
	ATOM	7494	O	ASP	A	956	46.164	50.521	-21.042	1.00	11.79	A
	ATOM	7495	N	LEU	A	957	48.053	50.704	-22.244	1.00	9.84	A
	ATOM	7496	CA	LEU	A	957	48.922	50.558	-21.080	1.00	9.73	A
	ATOM	7497	CB	LEU	A	957	50.052	49.567	-21.387	1.00	11.24	A
10	ATOM	7498	CG	LEU	A	957	50.977	49.172	-20.230	1.00	12.99	A
	ATOM	7499	CD1	LEU	A	957	50.171	48.464	-19.144	1.00	14.77	A
	ATOM	7500	CD2	LEU	A	957	52.086	48.257	-20.742	1.00	13.87	A
	ATOM	7501	C	LEU	A	957	49.524	51.894	-20.668	1.00	9.37	A
	ATOM	7502	O	LEU	A	957	49.927	52.694	-21.512	1.00	10.03	A
15	ATOM	7503	N	ASP	A	958	49.582	52.139	-19.366	1.00	8.45	A
	ATOM	7504	CA	ASP	A	958	50.169	53.374	-18.876	1.00	7.96	A
	ATOM	7505	CB	ASP	A	958	49.071	54.379	-18.495	1.00	8.11	A
	ATOM	7506	CG	ASP	A	958	49.620	55.761	-18.179	1.00	7.70	A
	ATOM	7507	OD1	ASP	A	958	50.731	56.094	-18.644	1.00	8.38	A
20	ATOM	7508	OD2	ASP	A	958	48.925	56.526	-17.472	1.00	9.30	A
	ATOM	7509	C	ASP	A	958	51.054	53.100	-17.672	1.00	7.71	A
	ATOM	7510	O	ASP	A	958	50.831	52.145	-16.922	1.00	7.72	A
	ATOM	7511	N	VAL	A	959	52.090	53.917	-17.529	1.00	7.93	A
	ATOM	7512	CA	VAL	A	959	52.982	53.840	-16.381	1.00	7.45	A
25	ATOM	7513	CB	VAL	A	959	54.446	54.104	-16.769	1.00	8.17	A
	ATOM	7514	CG1	VAL	A	959	55.310	54.221	-15.508	1.00	8.69	A
	ATOM	7515	CG2	VAL	A	959	54.957	52.963	-17.649	1.00	9.44	A
	ATOM	7516	C	VAL	A	959	52.435	54.981	-15.529	1.00	7.71	A
	ATOM	7517	O	VAL	A	959	52.868	56.131	-15.641	1.00	7.48	A
30	ATOM	7518	N	SER	A	960	51.437	54.651	-14.717	1.00	8.00	A
	ATOM	7519	CA	SER	A	960	50.759	55.617	-13.860	1.00	8.19	A
	ATOM	7520	CB	SER	A	960	49.654	54.919	-13.065	1.00	8.71	A
	ATOM	7521	OG	SER	A	960	48.832	54.137	-13.917	1.00	9.90	A
	ATOM	7522	C	SER	A	960	51.708	56.305	-12.901	1.00	8.29	A
35	ATOM	7523	O	SER	A	960	51.571	57.500	-12.626	1.00	7.81	A
	ATOM	7524	N	VAL	A	961	52.664	55.537	-12.391	1.00	8.17	A
	ATOM	7525	CA	VAL	A	961	53.641	56.055	-11.447	1.00	8.74	A
	ATOM	7526	CB	VAL	A	961	53.272	55.682	-9.984	1.00	9.01	A
	ATOM	7527	CG1	VAL	A	961	54.391	56.118	-9.037	1.00	8.99	A
40	ATOM	7528	CG2	VAL	A	961	51.954	56.332	-9.576	1.00	9.73	A
	ATOM	7529	C	VAL	A	961	55.039	55.502	-11.685	1.00	8.56	A
	ATOM	7530	O	VAL	A	961	55.211	54.314	-11.966	1.00	8.35	A
	ATOM	7531	N	MSE	A	962	56.025	56.388	-11.601	1.00	7.97	A
	ATOM	7532	CA	MSE	A	962	57.426	56.005	-11.672	1.00	7.71	A
45	ATOM	7533	CB	MSE	A	962	58.105	56.387	-12.982	1.00	9.07	A
	ATOM	7534	CG	MSE	A	962	59.572	55.988	-12.957	1.00	10.29	A
	ATOM	7535	SE	MSE	A	962	60.468	56.332	-14.600	1.00	16.74	A
	ATOM	7536	CE	MSE	A	962	62.233	55.692	-14.146	1.00	11.26	A
	ATOM	7537	C	MSE	A	962	58.024	56.816	-10.533	1.00	8.28	A
50	ATOM	7538	O	MSE	A	962	57.996	58.047	-10.553	1.00	8.57	A
	ATOM	7539	N	ARG	A	963	58.547	56.125	-9.528	1.00	7.92	A
	ATOM	7540	CA	ARG	A	963	59.101	56.792	-8.357	1.00	8.31	A
	ATOM	7541	CB	ARG	A	963	58.032	56.827	-7.253	1.00	8.77	A
	ATOM	7542	CG	ARG	A	963	58.504	57.343	-5.892	1.00	9.81	A
55	ATOM	7543	CD	ARG	A	963	57.395	57.201	-4.839	1.00	9.72	A
	ATOM	7544	NE	ARG	A	963	56.184	57.886	-5.277	1.00	7.97	A
	ATOM	7545	CZ	ARG	A	963	54.952	57.396	-5.169	1.00	7.38	A
	ATOM	7546	NH1	ARG	A	963	54.737	56.207	-4.615	1.00	7.56	A
	ATOM	7547	NH2	ARG	A	963	53.932	58.084	-5.670	1.00	7.55	A

5	ATOM	7548	C	ARG	A	963	60.339	56.101	-7.815	1.00	7.62	A
	ATOM	7549	O	ARG	A	963	60.291	54.920	-7.493	1.00	7.67	A
	ATOM	7550	N	ARG	A	964	61.449	56.828	-7.716	1.00	8.28	A
	ATOM	7551	CA	ARG	A	964	62.647	56.225	-7.145	1.00	8.89	A
	ATOM	7552	CB	ARG	A	964	63.884	57.089	-7.404	1.00	8.93	A
10	ATOM	7553	CG	ARG	A	964	65.167	56.450	-6.869	1.00	9.00	A
	ATOM	7554	CD	ARG	A	964	66.407	57.176	-7.367	1.00	10.27	A
	ATOM	7555	NE	ARG	A	964	66.602	57.011	-8.807	1.00	10.73	A
	ATOM	7556	CZ	ARG	A	964	67.433	56.134	-9.362	1.00	10.80	A
	ATOM	7557	NH1	ARG	A	964	68.166	55.324	-8.605	1.00	12.81	A
15	ATOM	7558	NH2	ARG	A	964	67.545	56.070	-10.684	1.00	12.53	A
	ATOM	7559	C	ARG	A	964	62.329	56.156	-5.655	1.00	9.28	A
	ATOM	7560	O	ARG	A	964	61.892	57.143	-5.057	1.00	9.41	A
	ATOM	7561	N	LEU	A	965	62.543	54.987	-5.066	1.00	9.53	A
	ATOM	7562	CA	LEU	A	965	62.217	54.754	-3.663	1.00	9.91	A
20	ATOM	7563	CB	LEU	A	965	61.586	53.367	-3.524	1.00	10.58	A
	ATOM	7564	CG	LEU	A	965	60.391	53.090	-4.442	1.00	10.29	A
	ATOM	7565	CD1	LEU	A	965	60.038	51.612	-4.420	1.00	10.06	A
	ATOM	7566	CD2	LEU	A	965	59.205	53.929	-4.000	1.00	11.47	A
	ATOM	7567	C	LEU	A	965	63.387	54.869	-2.695	1.00	10.70	A
25	ATOM	7568	O	LEU	A	965	63.196	54.816	-1.478	1.00	11.63	A
	ATOM	7569	N	THR	A	966	64.588	55.037	-3.234	1.00	10.63	A
	ATOM	7570	CA	THR	A	966	65.791	55.136	-2.413	1.00	11.37	A
	ATOM	7571	CB	THR	A	966	66.782	54.007	-2.762	1.00	11.25	A
	ATOM	7572	OG1	THR	A	966	66.908	53.906	-4.186	1.00	10.62	A
30	ATOM	7573	CG2	THR	A	966	66.304	52.678	-2.204	1.00	11.27	A
	ATOM	7574	C	THR	A	966	66.527	56.454	-2.599	1.00	11.74	A
	ATOM	7575	O	THR	A	966	66.485	57.045	-3.678	1.00	11.44	A
	ATOM	7576	N	LYS	A	967	67.193	56.907	-1.540	1.00	12.38	A
	ATOM	7577	CA	LYS	A	967	67.986	58.129	-1.591	1.00	13.90	A
35	ATOM	7578	CB	LYS	A	967	68.110	58.758	-0.202	1.00	15.59	A
	ATOM	7579	CG	LYS	A	967	66.814	59.377	0.312	1.00	18.36	A
	ATOM	7580	CD	LYS	A	967	67.054	60.147	1.600	1.00	20.78	A
	ATOM	7581	CE	LYS	A	967	65.797	60.856	2.074	1.00	22.33	A
	ATOM	7582	NZ	LYS	A	967	66.063	61.668	3.296	1.00	24.16	A
40	ATOM	7583	C	LYS	A	967	69.361	57.728	-2.129	1.00	14.35	A
	ATOM	7584	O	LYS	A	967	69.669	56.541	-2.218	1.00	13.76	A
	ATOM	7585	N	SER	A	968	70.180	58.713	-2.482	1.00	15.21	A
	ATOM	7586	CA	SER	A	968	71.497	58.452	-3.061	1.00	16.60	A
	ATOM	7587	CB	SER	A	968	72.183	59.776	-3.415	1.00	17.31	A
45	ATOM	7588	OG	SER	A	968	72.434	60.550	-2.257	1.00	19.84	A
	ATOM	7589	C	SER	A	968	72.464	57.592	-2.250	1.00	16.96	A
	ATOM	7590	O	SER	A	968	73.327	56.931	-2.826	1.00	18.10	A
	ATOM	7591	N	SER	A	969	72.320	57.593	-0.929	1.00	17.39	A
	ATOM	7592	CA	SER	A	969	73.214	56.819	-0.065	1.00	18.70	A
50	ATOM	7593	CB	SER	A	969	73.108	57.320	1.376	1.00	19.87	A
	ATOM	7594	OG	SER	A	969	71.782	57.194	1.862	1.00	23.45	A
	ATOM	7595	C	SER	A	969	72.999	55.306	-0.089	1.00	18.31	A
	ATOM	7596	O	SER	A	969	73.839	54.552	0.408	1.00	18.36	A
	ATOM	7597	N	ALA	A	970	71.887	54.856	-0.662	1.00	17.75	A
55	ATOM	7598	CA	ALA	A	970	71.595	53.427	-0.723	1.00	17.78	A
	ATOM	7599	CB	ALA	A	970	70.111	53.207	-0.997	1.00	17.81	A
	ATOM	7600	C	ALA	A	970	72.427	52.697	-1.772	1.00	18.18	A
	ATOM	7601	O	ALA	A	970	72.379	53.027	-2.959	1.00	18.06	A
	ATOM	7602	N	LYS	A	971	73.185	51.696	-1.328	1.00	18.93	A

5	ATOM	7603	CA	LYS	A	971	74.021	50.905	-2.226	1.00	19.90	A
	ATOM	7604	CB	LYS	A	971	74.726	49.793	-1.447	1.00	21.65	A
	ATOM	7605	CG	LYS	A	971	75.912	50.260	-0.619	1.00	24.85	A
	ATOM	7606	CD	LYS	A	971	76.437	49.145	0.278	1.00	25.97	A
	ATOM	7607	CE	LYS	A	971	76.653	47.850	-0.495	1.00	26.95	A
	ATOM	7608	NZ	LYS	A	971	77.570	48.023	-1.653	1.00	27.59	A
	ATOM	7609	C	LYS	A	971	73.185	50.290	-3.341	1.00	18.94	A
	ATOM	7610	O	LYS	A	971	73.598	50.269	-4.500	1.00	20.08	A
	ATOM	7611	N	THR	A	972	72.013	49.778	-2.982	1.00	18.05	A
	ATOM	7612	CA	THR	A	972	71.116	49.182	-3.961	1.00	16.90	A
10	ATOM	7613	CB	THR	A	972	70.563	47.820	-3.483	1.00	17.94	A
	ATOM	7614	OG1	THR	A	972	71.649	46.913	-3.252	1.00	19.39	A
	ATOM	7615	CG2	THR	A	972	69.641	47.222	-4.538	1.00	18.08	A
	ATOM	7616	C	THR	A	972	69.949	50.135	-4.183	1.00	15.14	A
15	ATOM	7617	O	THR	A	972	69.116	50.327	-3.298	1.00	14.90	A
	ATOM	7618	N	GLN	A	973	69.903	50.746	-5.361	1.00	13.21	A
	ATOM	7619	CA	GLN	A	973	68.832	51.678	-5.688	1.00	12.53	A
	ATOM	7620	CB	GLN	A	973	69.267	52.585	-6.841	1.00	11.85	A
20	ATOM	7621	CG	GLN	A	973	70.371	53.557	-6.466	1.00	11.87	A
	ATOM	7622	CD	GLN	A	973	69.924	54.569	-5.432	1.00	12.68	A
	ATOM	7623	OE1	GLN	A	973	70.548	54.720	-4.377	1.00	14.40	A
	ATOM	7624	NE2	GLN	A	973	68.840	55.275	-5.731	1.00	10.57	A
25	ATOM	7625	C	GLN	A	973	67.565	50.923	-6.062	1.00	11.92	A
	ATOM	7626	O	GLN	A	973	67.623	49.851	-6.656	1.00	12.62	A
	ATOM	7627	N	ARG	A	974	66.415	51.485	-5.706	1.00	11.58	A
	ATOM	7628	CA	ARG	A	974	65.143	50.856	-6.022	1.00	11.62	A
30	ATOM	7629	CB	ARG	A	974	64.485	50.318	-4.750	1.00	12.80	A
	ATOM	7630	CG	ARG	A	974	65.324	49.299	-3.994	1.00	14.41	A
	ATOM	7631	CD	ARG	A	974	64.713	48.990	-2.633	1.00	15.71	A
	ATOM	7632	NE	ARG	A	974	63.450	48.264	-2.738	1.00	19.08	A
35	ATOM	7633	CZ	ARG	A	974	62.310	48.656	-2.176	1.00	18.19	A
	ATOM	7634	NH1	ARG	A	974	62.263	49.776	-1.466	1.00	19.24	A
	ATOM	7635	NH2	ARG	A	974	61.217	47.919	-2.317	1.00	19.09	A
	ATOM	7636	C	ARG	A	974	64.215	51.865	-6.685	1.00	10.37	A
40	ATOM	7637	O	ARG	A	974	64.117	53.012	-6.246	1.00	11.02	A
	ATOM	7638	N	VAL	A	975	63.547	51.436	-7.750	1.00	10.47	A
	ATOM	7639	CA	VAL	A	975	62.612	52.300	-8.458	1.00	10.13	A
	ATOM	7640	CB	VAL	A	975	63.130	52.680	-9.860	1.00	10.67	A
45	ATOM	7641	CG1	VAL	A	975	62.104	53.560	-10.579	1.00	10.06	A
	ATOM	7642	CG2	VAL	A	975	64.450	53.423	-9.736	1.00	10.88	A
	ATOM	7643	C	VAL	A	975	61.287	51.567	-8.594	1.00	10.08	A
	ATOM	7644	O	VAL	A	975	61.232	50.423	-9.063	1.00	9.41	A
50	ATOM	7645	N	GLY	A	976	60.217	52.232	-8.178	1.00	9.67	A
	ATOM	7646	CA	GLY	A	976	58.904	51.622	-8.247	1.00	9.24	A
	ATOM	7647	C	GLY	A	976	58.067	52.121	-9.405	1.00	8.66	A
	ATOM	7648	O	GLY	A	976	58.142	53.290	-9.793	1.00	8.68	A
55	ATOM	7649	N	TYR	A	977	57.268	51.218	-9.958	1.00	8.45	A
	ATOM	7650	CA	TYR	A	977	56.390	51.541	-11.072	1.00	8.07	A
	ATOM	7651	CB	TYR	A	977	56.874	50.892	-12.374	1.00	8.64	A
	ATOM	7652	CG	TYR	A	977	58.271	51.257	-12.791	1.00	8.17	A
	ATOM	7653	CD1	TYR	A	977	59.371	50.548	-12.312	1.00	8.99	A
	ATOM	7654	CE1	TYR	A	977	60.664	50.885	-12.706	1.00	9.30	A
	ATOM	7655	CD2	TYR	A	977	58.496	52.314	-13.673	1.00	8.85	A
	ATOM	7656	CE2	TYR	A	977	59.773	52.662	-14.068	1.00	10.31	A
	ATOM	7657	CZ	TYR	A	977	60.855	51.947	-13.586	1.00	9.76	A

5	ATOM	7658	OH	TYR	A	977	62.125	52.302	-13.980	1.00	11.36	A
	ATOM	7659	C	TYR	A	977	54.993	51.012	-10.822	1.00	7.74	A
	ATOM	7660	O	TYR	A	977	54.828	49.906	-10.307	1.00	8.14	A
	ATOM	7661	N	VAL	A	978	53.987	51.807	-11.174	1.00	7.18	A
	ATOM	7662	CA	VAL	A	978	52.613	51.346	-11.084	1.00	7.63	A
10	ATOM	7663	CB	VAL	A	978	51.693	52.298	-10.300	1.00	7.48	A
	ATOM	7664	CG1	VAL	A	978	50.250	51.818	-10.418	1.00	8.22	A
	ATOM	7665	CG2	VAL	A	978	52.098	52.321	-8.837	1.00	8.52	A
	ATOM	7666	C	VAL	A	978	52.168	51.312	-12.537	1.00	7.85	A
	ATOM	7667	O	VAL	A	978	52.203	52.333	-13.225	1.00	8.22	A
15	ATOM	7668	N	LEU	A	979	51.794	50.126	-13.000	1.00	8.70	A
	ATOM	7669	CA	LEU	A	979	51.350	49.919	-14.369	1.00	10.20	A
	ATOM	7670	CB	LEU	A	979	52.084	48.724	-14.982	1.00	12.54	A
	ATOM	7671	CG	LEU	A	979	53.417	48.976	-15.684	1.00	16.22	A
	ATOM	7672	CD1	LEU	A	979	53.139	49.476	-17.089	1.00	16.69	A
20	ATOM	7673	CD2	LEU	A	979	54.262	49.969	-14.897	1.00	16.92	A
	ATOM	7674	C	LEU	A	979	49.856	49.663	-14.417	1.00	9.64	A
	ATOM	7675	O	LEU	A	979	49.343	48.787	-13.724	1.00	10.75	A
	ATOM	7676	N	HIS	A	980	49.152	50.435	-15.233	1.00	9.35	A
	ATOM	7677	CA	HIS	A	980	47.724	50.240	-15.370	1.00	9.64	A
25	ATOM	7678	CB	HIS	A	980	46.926	51.443	-14.863	1.00	9.78	A
	ATOM	7679	CG	HIS	A	980	45.447	51.254	-14.994	1.00	9.39	A
	ATOM	7680	CD2	HIS	A	980	44.602	50.431	-14.332	1.00	7.39	A
	ATOM	7681	ND1	HIS	A	980	44.693	51.871	-15.969	1.00	10.35	A
	ATOM	7682	CE1	HIS	A	980	43.448	51.432	-15.903	1.00	7.04	A
30	ATOM	7683	NE2	HIS	A	980	43.367	50.555	-14.918	1.00	10.79	A
	ATOM	7684	C	HIS	A	980	47.348	50.005	-16.817	1.00	10.11	A
	ATOM	7685	O	HIS	A	980	47.788	50.728	-17.705	1.00	11.06	A
	ATOM	7686	N	ARG	A	981	46.537	48.984	-17.052	1.00	9.65	A
	ATOM	7687	CA	ARG	A	981	46.076	48.711	-18.397	1.00	10.37	A
35	ATOM	7688	CB	ARG	A	981	46.436	47.295	-18.832	1.00	12.59	A
	ATOM	7689	CG	ARG	A	981	46.052	46.995	-20.272	1.00	16.41	A
	ATOM	7690	CD	ARG	A	981	46.568	45.634	-20.691	1.00	19.84	A
	ATOM	7691	NE	ARG	A	981	46.118	45.254	-22.024	1.00	23.55	A
	ATOM	7692	CZ	ARG	A	981	46.338	44.058	-22.564	1.00	25.07	A
40	ATOM	7693	NH1	ARG	A	981	47.001	43.135	-21.880	1.00	25.67	A
	ATOM	7694	NH2	ARG	A	981	45.890	43.780	-23.782	1.00	26.12	A
	ATOM	7695	C	ARG	A	981	44.572	48.872	-18.360	1.00	9.55	A
	ATOM	7696	O	ARG	A	981	43.892	48.218	-17.576	1.00	9.46	A
	ATOM	7697	N	THR	A	982	44.056	49.770	-19.185	1.00	9.57	A
45	ATOM	7698	CA	THR	A	982	42.621	49.990	-19.245	1.00	9.61	A
	ATOM	7699	CB	THR	A	982	42.322	51.447	-19.679	1.00	9.52	A
	ATOM	7700	OG1	THR	A	982	40.921	51.716	-19.547	1.00	9.48	A
	ATOM	7701	CG2	THR	A	982	42.772	51.685	-21.120	1.00	10.43	A
	ATOM	7702	C	THR	A	982	42.095	48.993	-20.280	1.00	10.60	A
50	ATOM	7703	O	THR	A	982	42.833	48.111	-20.716	1.00	11.44	A
	ATOM	7704	N	ASN	A	983	40.824	49.100	-20.642	1.00	9.38	A
	ATOM	7705	CA	ASN	A	983	40.261	48.211	-21.652	1.00	10.07	A
	ATOM	7706	CB	ASN	A	983	39.252	47.227	-21.057	1.00	9.79	A
	ATOM	7707	CG	ASN	A	983	38.746	46.233	-22.088	1.00	9.90	A
55	ATOM	7708	OD1	ASN	A	983	39.470	45.322	-22.493	1.00	11.26	A
	ATOM	7709	ND2	ASN	A	983	37.510	46.418	-22.535	1.00	11.73	A
	ATOM	7710	C	ASN	A	983	39.560	49.077	-22.682	1.00	10.88	A
	ATOM	7711	O	ASN	A	983	38.624	49.811	-22.359	1.00	10.83	A
	ATOM	7712	N	LEU	A	984	40.029	48.994	-23.920	1.00	11.31	A

5	ATOM	7713	CA	LEU	A	984	39.461	49.778	-25.003	1.00	13.01	A
	ATOM	7714	CB	LEU	A	984	40.574	50.464	-25.790	1.00	13.38	A
	ATOM	7715	CG	LEU	A	984	41.532	51.306	-24.945	1.00	13.55	A
	ATOM	7716	CD1	LEU	A	984	42.655	51.828	-25.825	1.00	14.92	A
	ATOM	7717	CD2	LEU	A	984	40.774	52.448	-24.282	1.00	13.40	A
	ATOM	7718	C	LEU	A	984	38.674	48.868	-25.919	1.00	14.57	A
	ATOM	7719	O	LEU	A	984	39.067	47.731	-26.167	1.00	14.53	A
	ATOM	7720	N	MSE	A	985	37.557	49.371	-26.422	1.00	16.64	A
10	ATOM	7721	CA	MSE	A	985	36.724	48.579	-27.307	1.00	20.14	A
	ATOM	7722	CB	MSE	A	985	35.417	49.300	-27.593	1.00	22.91	A
	ATOM	7723	CG	MSE	A	985	34.540	49.482	-26.392	1.00	26.23	A
	ATOM	7724	SE	MSE	A	985	32.730	49.389	-26.975	1.00	32.71	A
15	ATOM	7725	CE	MSE	A	985	32.637	51.060	-27.940	1.00	29.41	A
	ATOM	7726	C	MSE	A	985	37.403	48.274	-28.625	1.00	21.11	A
	ATOM	7727	O	MSE	A	985	38.127	49.101	-29.178	1.00	21.04	A
	ATOM	7728	N	GLN	A	986	37.169	47.070	-29.124	1.00	22.25	A
20	ATOM	7729	CA	GLN	A	986	37.721	46.669	-30.403	1.00	23.97	A
	ATOM	7730	CB	GLN	A	986	38.052	45.174	-30.389	1.00	26.84	A
	ATOM	7731	CG	GLN	A	986	36.990	44.298	-29.749	1.00	30.56	A
	ATOM	7732	CD	GLN	A	986	37.548	42.971	-29.263	1.00	32.21	A
	ATOM	7733	OE1	GLN	A	986	36.814	42.126	-28.750	1.00	33.51	A
	ATOM	7734	NE2	GLN	A	986	38.856	42.785	-29.416	1.00	33.24	A
25	ATOM	7735	C	GLN	A	986	36.626	46.995	-31.407	1.00	23.34	A
	ATOM	7736	O	GLN	A	986	35.513	46.474	-31.314	1.00	23.11	A
	ATOM	7737	N	CYS	A	987	36.929	47.885	-32.346	1.00	22.85	A
	ATOM	7738	CA	CYS	A	987	35.944	48.289	-33.338	1.00	23.08	A
	ATOM	7739	C	CYS	A	987	36.405	48.051	-34.771	1.00	24.34	A
	ATOM	7740	O	CYS	A	987	35.897	48.679	-35.701	1.00	24.34	A
30	ATOM	7741	CB	CYS	A	987	35.592	49.767	-33.160	1.00	22.10	A
	ATOM	7742	SG	CYS	A	987	35.108	50.279	-31.476	1.00	21.61	A
	ATOM	7743	N	GLY	A	988	37.371	47.156	-34.949	1.00	25.32	A
	ATOM	7744	CA	GLY	A	988	37.845	46.849	-36.287	1.00	28.05	A
	ATOM	7745	C	GLY	A	988	39.102	47.560	-36.744	1.00	29.88	A
35	ATOM	7746	O	GLY	A	988	39.416	47.558	-37.937	1.00	29.77	A
	ATOM	7747	N	THR	A	989	39.826	48.170	-35.813	1.00	31.64	A
	ATOM	7748	CA	THR	A	989	41.057	48.868	-36.159	1.00	33.74	A
	ATOM	7749	CB	THR	A	989	41.213	50.170	-35.354	1.00	33.53	A
	ATOM	7750	OG1	THR	A	989	40.077	51.012	-35.584	1.00	34.03	A
40	ATOM	7751	CG2	THR	A	989	42.472	50.909	-35.781	1.00	33.57	A
	ATOM	7752	C	THR	A	989	42.253	47.967	-35.875	1.00	35.49	A
	ATOM	7753	O	THR	A	989	42.463	47.537	-34.741	1.00	35.26	A
	ATOM	7754	N	PRO	A	990	43.052	47.666	-36.912	1.00	37.38	A
45	ATOM	7755	CD	PRO	A	990	42.900	48.144	-38.298	1.00	37.60	A
	ATOM	7756	CA	PRO	A	990	44.236	46.810	-36.788	1.00	39.24	A
	ATOM	7757	CB	PRO	A	990	44.979	47.076	-38.090	1.00	38.87	A
	ATOM	7758	CG	PRO	A	990	43.853	47.242	-39.061	1.00	38.12	A
	ATOM	7759	C	PRO	A	990	45.087	47.105	-35.553	1.00	41.21	A
50	ATOM	7760	O	PRO	A	990	45.363	46.205	-34.759	1.00	41.51	A
	ATOM	7761	N	GLU	A	991	45.499	48.360	-35.395	1.00	43.24	A
	ATOM	7762	CA	GLU	A	991	46.316	48.756	-34.250	1.00	45.36	A
	ATOM	7763	CB	GLU	A	991	45.471	48.710	-32.975	1.00	46.82	A
	ATOM	7764	CG	GLU	A	991	44.233	49.595	-33.029	1.00	48.73	A
	ATOM	7765	CD	GLU	A	991	43.276	49.336	-31.881	1.00	49.86	A
	ATOM	7766	OE1	GLU	A	991	43.701	49.450	-30.713	1.00	50.20	A
55	ATOM	7767	OE2	GLU	A	991	42.097	49.018	-32.149	1.00	50.38	A

5	ATOM	7768	C	GLU	A	991	47.513	47.816	-34.120	1.00	45.81	A
	ATOM	7769	O	GLU	A	991	47.428	46.774	-33.470	1.00	46.00	A
	ATOM	7770	N	GLU	A	992	48.630	48.193	-34.733	1.00	46.27	A
	ATOM	7771	CA	GLU	A	992	49.825	47.359	-34.705	1.00	46.79	A
	ATOM	7772	CB	GLU	A	992	50.172	46.919	-36.130	1.00	47.94	A
10	ATOM	7773	CG	GLU	A	992	49.080	46.124	-36.825	1.00	49.54	A
	ATOM	7774	CD	GLU	A	992	49.384	45.880	-38.291	1.00	50.48	A
	ATOM	7775	OE1	GLU	A	992	50.469	45.341	-38.596	1.00	50.94	A
	ATOM	7776	OE2	GLU	A	992	48.534	46.226	-39.140	1.00	51.09	A
	ATOM	7777	C	GLU	A	992	51.052	48.015	-34.075	1.00	46.42	A
15	ATOM	7778	O	GLU	A	992	50.947	48.832	-33.161	1.00	46.39	A
	ATOM	7779	N	HIS	A	993	52.214	47.625	-34.593	1.00	45.82	A
	ATOM	7780	CA	HIS	A	993	53.526	48.105	-34.167	1.00	44.90	A
	ATOM	7781	CB	HIS	A	993	54.113	49.027	-35.249	1.00	46.12	A
	ATOM	7782	CG	HIS	A	993	53.206	50.144	-35.668	1.00	47.42	A
20	ATOM	7783	CD2	HIS	A	993	52.148	50.721	-35.049	1.00	47.85	A
	ATOM	7784	ND1	HIS	A	993	53.364	50.818	-36.860	1.00	47.77	A
	ATOM	7785	CE1	HIS	A	993	52.442	51.758	-36.959	1.00	48.01	A
	ATOM	7786	NE2	HIS	A	993	51.691	51.721	-35.873	1.00	48.09	A
	ATOM	7787	C	HIS	A	993	53.669	48.760	-32.794	1.00	43.41	A
25	ATOM	7788	O	HIS	A	993	53.618	49.983	-32.662	1.00	43.54	A
	ATOM	7789	N	THR	A	994	53.858	47.923	-31.776	1.00	41.20	A
	ATOM	7790	CA	THR	A	994	54.058	48.377	-30.401	1.00	38.33	A
	ATOM	7791	CB	THR	A	994	52.741	48.405	-29.592	1.00	38.20	A
	ATOM	7792	OG1	THR	A	994	52.211	47.079	-29.480	1.00	37.64	A
30	ATOM	7793	CG2	THR	A	994	51.721	49.307	-30.267	1.00	37.89	A
	ATOM	7794	C	THR	A	994	55.028	47.405	-29.734	1.00	36.67	A
	ATOM	7795	O	THR	A	994	54.980	46.200	-29.982	1.00	36.66	A
	ATOM	7796	N	GLN	A	995	55.908	47.931	-28.889	1.00	34.18	A
	ATOM	7797	CA	GLN	A	995	56.899	47.105	-28.210	1.00	31.74	A
35	ATOM	7798	CB	GLN	A	995	58.227	47.851	-28.120	1.00	32.78	A
	ATOM	7799	CG	GLN	A	995	58.693	48.461	-29.423	1.00	34.00	A
	ATOM	7800	CD	GLN	A	995	59.846	49.417	-29.219	1.00	35.18	A
	ATOM	7801	OE1	GLN	A	995	60.953	49.009	-28.862	1.00	35.89	A
	ATOM	7802	NE2	GLN	A	995	59.589	50.703	-29.428	1.00	34.40	A
40	ATOM	7803	C	GLN	A	995	56.467	46.719	-26.804	1.00	29.41	A
	ATOM	7804	O	GLN	A	995	55.719	47.446	-26.150	1.00	28.31	A
	ATOM	7805	N	LYS	A	996	56.952	45.573	-26.341	1.00	27.07	A
	ATOM	7806	CA	LYS	A	996	56.639	45.110	-25.000	1.00	25.50	A
	ATOM	7807	CB	LYS	A	996	57.143	43.678	-24.793	1.00	27.59	A
45	ATOM	7808	CG	LYS	A	996	56.424	42.636	-25.635	1.00	30.19	A
	ATOM	7809	CD	LYS	A	996	54.951	42.545	-25.263	1.00	31.86	A
	ATOM	7810	CE	LYS	A	996	54.246	41.461	-26.063	1.00	32.41	A
	ATOM	7811	NZ	LYS	A	996	54.837	40.117	-25.811	1.00	33.07	A
	ATOM	7812	C	LYS	A	996	57.333	46.045	-24.024	1.00	23.02	A
50	ATOM	7813	O	LYS	A	996	58.498	46.399	-24.210	1.00	21.73	A
	ATOM	7814	N	LEU	A	997	56.613	46.456	-22.989	1.00	20.46	A
	ATOM	7815	CA	LEU	A	997	57.183	47.350	-21.998	1.00	18.95	A
	ATOM	7816	CB	LEU	A	997	56.180	48.443	-21.622	1.00	18.97	A
	ATOM	7817	CG	LEU	A	997	56.621	49.367	-20.483	1.00	19.50	A
55	ATOM	7818	CD1	LEU	A	997	57.859	50.141	-20.903	1.00	19.83	A
	ATOM	7819	CD2	LEU	A	997	55.493	50.316	-20.125	1.00	19.35	A
	ATOM	7820	C	LEU	A	997	57.582	46.588	-20.748	1.00	17.48	A
	ATOM	7821	O	LEU	A	997	56.732	46.021	-20.065	1.00	17.65	A
	ATOM	7822	N	ASP	A	998	58.880	46.566	-20.467	1.00	16.19	A

5	ATOM	7823	CA	ASP	A	998	59.399	45.910	-19.273	1.00	15.60	A
	ATOM	7824	CB	ASP	A	998	60.500	44.912	-19.633	1.00	16.76	A
	ATOM	7825	CG	ASP	A	998	61.145	44.295	-18.408	1.00	17.89	A
	ATOM	7826	OD1	ASP	A	998	62.170	43.600	-18.564	1.00	18.83	A
	ATOM	7827	OD2	ASP	A	998	60.626	44.503	-17.289	1.00	17.40	A
	ATOM	7828	C	ASP	A	998	59.976	47.028	-18.414	1.00	14.75	A
	ATOM	7829	O	ASP	A	998	61.117	47.447	-18.609	1.00	14.20	A
	ATOM	7830	N	VAL	A	999	59.185	47.521	-17.469	1.00	14.42	A
10	ATOM	7831	CA	VAL	A	999	59.642	48.617	-16.628	1.00	14.11	A
	ATOM	7832	CB	VAL	A	999	58.532	49.089	-15.655	1.00	13.61	A
	ATOM	7833	CG1	VAL	A	999	57.346	49.614	-16.447	1.00	14.23	A
	ATOM	7834	CG2	VAL	A	999	58.109	47.955	-14.738	1.00	14.31	A
15	ATOM	7835	C	VAL	A	999	60.897	48.299	-15.827	1.00	14.57	A
	ATOM	7836	O	VAL	A	999	61.669	49.195	-15.494	1.00	14.03	A
	ATOM	7837	N	CYS	A	1000	61.116	47.027	-15.527	1.00	15.40	A
	ATOM	7838	CA	CYS	A	1000	62.288	46.673	-14.750	1.00	16.88	A
	ATOM	7839	C	CYS	A	1000	63.609	46.871	-15.487	1.00	16.40	A
20	ATOM	7840	O	CYS	A	1000	64.666	46.894	-14.864	1.00	16.72	A
	ATOM	7841	CB	CYS	A	1000	62.159	45.245	-14.220	1.00	17.93	A
	ATOM	7842	SG	CYS	A	1000	61.365	45.181	-12.575	1.00	21.77	A
	ATOM	7843	N	HIS	A	1001	63.555	47.033	-16.806	1.00	16.66	A
	ATOM	7844	CA	HIS	A	1001	64.779	47.258	-17.569	1.00	17.02	A
	ATOM	7845	CB	HIS	A	1001	64.903	46.251	-18.720	1.00	17.37	A
25	ATOM	7846	CG	HIS	A	1001	65.459	44.925	-18.303	1.00	18.58	A
	ATOM	7847	CD2	HIS	A	1001	66.716	44.427	-18.368	1.00	18.89	A
	ATOM	7848	ND1	HIS	A	1001	64.693	43.951	-17.698	1.00	18.64	A
	ATOM	7849	CE1	HIS	A	1001	65.455	42.911	-17.408	1.00	19.12	A
30	ATOM	7850	NE2	HIS	A	1001	66.687	43.174	-17.804	1.00	19.79	A
	ATOM	7851	C	HIS	A	1001	64.896	48.684	-18.109	1.00	17.08	A
	ATOM	7852	O	HIS	A	1001	65.742	48.962	-18.960	1.00	17.52	A
	ATOM	7853	N	LEU	A	1002	64.053	49.588	-17.615	1.00	16.75	A
	ATOM	7854	CA	LEU	A	1002	64.101	50.981	-18.057	1.00	16.76	A
	ATOM	7855	CB	LEU	A	1002	62.885	51.754	-17.545	1.00	16.55	A
35	ATOM	7856	CG	LEU	A	1002	61.597	51.523	-18.337	1.00	15.47	A
	ATOM	7857	CD1	LEU	A	1002	60.434	52.218	-17.648	1.00	15.32	A
	ATOM	7858	CD2	LEU	A	1002	61.775	52.056	-19.754	1.00	16.05	A
	ATOM	7859	C	LEU	A	1002	65.380	51.646	-17.566	1.00	17.51	A
40	ATOM	7860	O	LEU	A	1002	65.901	52.561	-18.205	1.00	18.66	A
	ATOM	7861	N	LEU	A	1003	65.869	51.190	-16.418	1.00	17.61	A
	ATOM	7862	CA	LEU	A	1003	67.108	51.704	-15.847	1.00	18.02	A
	ATOM	7863	CB	LEU	A	1003	66.906	52.109	-14.387	1.00	18.59	A
	ATOM	7864	CG	LEU	A	1003	66.180	53.442	-14.184	1.00	20.43	A
	ATOM	7865	CD1	LEU	A	1003	65.881	53.644	-12.717	1.00	20.90	A
45	ATOM	7866	CD2	LEU	A	1003	67.041	54.581	-14.716	1.00	20.41	A
	ATOM	7867	C	LEU	A	1003	68.135	50.583	-15.957	1.00	18.42	A
	ATOM	7868	O	LEU	A	1003	67.802	49.409	-15.805	1.00	17.92	A
	ATOM	7869	N	PRO	A	1004	69.399	50.930	-16.229	1.00	18.76	A
50	ATOM	7870	CD	PRO	A	1004	69.943	52.285	-16.433	1.00	19.13	A
	ATOM	7871	CA	PRO	A	1004	70.453	49.923	-16.364	1.00	18.84	A
	ATOM	7872	CB	PRO	A	1004	71.580	50.708	-17.022	1.00	19.50	A
	ATOM	7873	CG	PRO	A	1004	71.443	52.046	-16.377	1.00	19.67	A
	ATOM	7874	C	PRO	A	1004	70.903	49.252	-15.071	1.00	19.22	A
	ATOM	7875	O	PRO	A	1004	70.568	49.692	-13.968	1.00	18.35	A
55	ATOM	7876	N	ASN	A	1005	71.658	48.168	-15.233	1.00	19.25	A
	ATOM	7877	CA	ASN	A	1005	72.210	47.420	-14.112	1.00	19.59	A

5	ATOM	7878	CB	ASN	A1005	73.166	48.321	-13.330	1.00	20.66	A
	ATOM	7879	CG	ASN	A1005	74.151	49.043	-14.231	1.00	21.46	A
	ATOM	7880	OD1	ASN	A1005	74.441	50.223	-14.030	1.00	23.60	A
	ATOM	7881	ND2	ASN	A1005	74.673	48.336	-15.225	1.00	22.61	A
	ATOM	7882	C	ASN	A1005	71.156	46.857	-13.163	1.00	19.34	A
10	ATOM	7883	O	ASN	A1005	71.314	46.933	-11.945	1.00	19.19	A
	ATOM	7884	N	VAL	A1006	70.087	46.291	-13.713	1.00	19.06	A
	ATOM	7885	CA	VAL	A1006	69.036	45.723	-12.876	1.00	19.31	A
	ATOM	7886	CB	VAL	A1006	67.747	45.434	-13.693	1.00	19.18	A
	ATOM	7887	CG1	VAL	A1006	68.019	44.404	-14.773	1.00	19.81	A
15	ATOM	7888	CG2	VAL	A1006	66.639	44.957	-12.764	1.00	19.49	A
	ATOM	7889	C	VAL	A1006	69.545	44.435	-12.230	1.00	19.15	A
	ATOM	7890	O	VAL	A1006	70.094	43.563	-12.906	1.00	19.87	A
	ATOM	7891	N	ALA	A1007	69.368	44.331	-10.916	1.00	18.45	A
	ATOM	7892	CA	ALA	A1007	69.817	43.169	-10.154	1.00	18.81	A
20	ATOM	7893	CB	ALA	A1007	70.580	43.629	-8.919	1.00	18.61	A
	ATOM	7894	C	ALA	A1007	68.652	42.272	-9.748	1.00	19.17	A
	ATOM	7895	O	ALA	A1007	68.836	41.086	-9.472	1.00	19.63	A
	ATOM	7896	N	ARG	A1008	67.455	42.844	-9.695	1.00	19.17	A
	ATOM	7897	CA	ARG	A1008	66.265	42.078	-9.349	1.00	19.29	A
25	ATOM	7898	CB	ARG	A1008	66.261	41.696	-7.863	1.00	22.65	A
	ATOM	7899	CG	ARG	A1008	66.156	42.852	-6.896	1.00	27.30	A
	ATOM	7900	CD	ARG	A1008	66.010	42.347	-5.466	1.00	31.10	A
	ATOM	7901	NE	ARG	A1008	67.134	41.503	-5.065	1.00	34.46	A
	ATOM	7902	CZ	ARG	A1008	68.392	41.924	-4.962	1.00	36.16	A
30	ATOM	7903	NH1	ARG	A1008	68.699	43.187	-5.228	1.00	37.00	A
	ATOM	7904	NH2	ARG	A1008	69.347	41.078	-4.596	1.00	37.06	A
	ATOM	7905	C	ARG	A1008	65.003	42.855	-9.688	1.00	17.93	A
	ATOM	7906	O	ARG	A1008	65.010	44.085	-9.738	1.00	17.30	A
	ATOM	7907	N	CYS	A1009	63.927	42.118	-9.933	1.00	16.65	A
35	ATOM	7908	CA	CYS	A1009	62.636	42.698	-10.276	1.00	16.67	A
	ATOM	7909	C	CYS	A1009	61.592	41.996	-9.427	1.00	15.78	A
	ATOM	7910	O	CYS	A1009	61.519	40.768	-9.412	1.00	15.09	A
	ATOM	7911	CB	CYS	A1009	62.339	42.464	-11.753	1.00	18.24	A
	ATOM	7912	SG	CYS	A1009	60.816	43.242	-12.385	1.00	21.28	A
40	ATOM	7913	N	GLU	A1010	60.776	42.775	-8.727	1.00	14.67	A
	ATOM	7914	CA	GLU	A1010	59.761	42.197	-7.866	1.00	14.58	A
	ATOM	7915	CB	GLU	A1010	60.174	42.376	-6.401	1.00	15.93	A
	ATOM	7916	CG	GLU	A1010	61.501	41.712	-6.045	1.00	18.90	A
	ATOM	7917	CD	GLU	A1010	62.107	42.248	-4.760	1.00	20.54	A
45	ATOM	7918	OE1	GLU	A1010	62.440	43.452	-4.712	1.00	22.00	A
	ATOM	7919	OE2	GLU	A1010	62.255	41.466	-3.796	1.00	22.46	A
	ATOM	7920	C	GLU	A1010	58.394	42.827	-8.075	1.00	13.40	A
	ATOM	7921	O	GLU	A1010	58.284	44.024	-8.347	1.00	13.98	A
	ATOM	7922	N	ARG	A1011	57.354	42.009	-7.970	1.00	12.76	A
50	ATOM	7923	CA	ARG	A1011	55.991	42.512	-8.072	1.00	12.10	A
	ATOM	7924	CB	ARG	A1011	55.034	41.430	-8.573	1.00	13.80	A
	ATOM	7925	CG	ARG	A1011	53.614	41.929	-8.812	1.00	18.17	A
	ATOM	7926	CD	ARG	A1011	52.618	40.774	-8.865	1.00	22.69	A
	ATOM	7927	NE	ARG	A1011	52.950	39.783	-9.883	1.00	27.58	A
55	ATOM	7928	CZ	ARG	A1011	52.911	40.010	-11.192	1.00	28.97	A
	ATOM	7929	NH1	ARG	A1011	52.554	41.203	-11.651	1.00	30.64	A
	ATOM	7930	NH2	ARG	A1011	53.224	39.040	-12.044	1.00	29.56	A
	ATOM	7931	C	ARG	A1011	55.666	42.853	-6.621	1.00	11.53	A
	ATOM	7932	O	ARG	A1011	55.977	42.076	-5.712	1.00	11.37	A

5	ATOM	7933	N	THR	A1012	55.062	44.012	-6.397	1.00	10.37	A
	ATOM	7934	CA	THR	A1012	54.734	44.446	-5.045	1.00	9.85	A
	ATOM	7935	CB	THR	A1012	55.624	45.631	-4.618	1.00	11.29	A
	ATOM	7936	OG1	THR	A1012	55.297	46.777	-5.421	1.00	10.95	A
	ATOM	7937	CG2	THR	A1012	57.097	45.301	-4.810	1.00	11.40	A
10	ATOM	7938	C	THR	A1012	53.295	44.931	-4.955	1.00	10.13	A
	ATOM	7939	O	THR	A1012	52.595	45.038	-5.961	1.00	9.43	A
	ATOM	7940	N	THR	A1013	52.858	45.216	-3.733	1.00	9.30	A
	ATOM	7941	CA	THR	A1013	51.532	45.772	-3.522	1.00	9.02	A
	ATOM	7942	CB	THR	A1013	51.229	45.899	-2.024	1.00	9.03	A
15	ATOM	7943	OG1	THR	A1013	52.399	46.365	-1.344	1.00	8.79	A
	ATOM	7944	CG2	THR	A1013	50.809	44.553	-1.442	1.00	10.35	A
	ATOM	7945	C	THR	A1013	51.622	47.164	-4.163	1.00	8.71	A
	ATOM	7946	O	THR	A1013	52.721	47.685	-4.366	1.00	8.56	A
	ATOM	7947	N	LEU	A1014	50.484	47.776	-4.469	1.00	8.27	A
20	ATOM	7948	CA	LEU	A1014	50.504	49.082	-5.133	1.00	7.70	A
	ATOM	7949	CB	LEU	A1014	49.085	49.520	-5.491	1.00	7.86	A
	ATOM	7950	CG	LEU	A1014	48.309	48.581	-6.414	1.00	7.61	A
	ATOM	7951	CD1	LEU	A1014	47.005	49.264	-6.789	1.00	8.33	A
	ATOM	7952	CD2	LEU	A1014	49.116	48.242	-7.667	1.00	8.06	A
25	ATOM	7953	C	LEU	A1014	51.197	50.205	-4.376	1.00	7.40	A
	ATOM	7954	O	LEU	A1014	51.552	51.228	-4.964	1.00	7.36	A
	ATOM	7955	N	THR	A1015	51.382	50.011	-3.076	1.00	7.72	A
	ATOM	7956	CA	THR	A1015	52.037	50.991	-2.220	1.00	7.89	A
	ATOM	7957	CB	THR	A1015	51.511	50.885	-0.794	1.00	8.20	A
30	ATOM	7958	OG1	THR	A1015	51.649	49.527	-0.362	1.00	8.50	A
	ATOM	7959	CG2	THR	A1015	50.045	51.287	-0.724	1.00	8.31	A
	ATOM	7960	C	THR	A1015	53.544	50.741	-2.166	1.00	8.46	A
	ATOM	7961	O	THR	A1015	54.274	51.501	-1.528	1.00	9.16	A
	ATOM	7962	N	PHE	A1016	53.988	49.668	-2.823	1.00	8.59	A
35	ATOM	7963	CA	PHE	A1016	55.402	49.273	-2.867	1.00	9.00	A
	ATOM	7964	CB	PHE	A1016	56.298	50.457	-3.263	1.00	9.48	A
	ATOM	7965	CG	PHE	A1016	55.972	51.061	-4.598	1.00	8.69	A
	ATOM	7966	CD1	PHE	A1016	55.795	52.438	-4.718	1.00	8.66	A
	ATOM	7967	CD2	PHE	A1016	55.877	50.270	-5.738	1.00	8.29	A
40	ATOM	7968	CE1	PHE	A1016	55.528	53.016	-5.956	1.00	8.19	A
	ATOM	7969	CE2	PHE	A1016	55.609	50.841	-6.981	1.00	9.07	A
	ATOM	7970	CZ	PHE	A1016	55.435	52.213	-7.089	1.00	9.64	A
	ATOM	7971	C	PHE	A1016	55.899	48.744	-1.523	1.00	9.84	A
	ATOM	7972	O	PHE	A1016	57.089	48.470	-1.368	1.00	10.75	A
45	ATOM	7973	N	LEU	A1017	54.996	48.579	-0.562	1.00	10.15	A
	ATOM	7974	CA	LEU	A1017	55.400	48.144	0.773	1.00	10.97	A
	ATOM	7975	CB	LEU	A1017	54.430	48.717	1.808	1.00	10.65	A
	ATOM	7976	CG	LEU	A1017	54.380	50.250	1.792	1.00	9.95	A
	ATOM	7977	CD1	LEU	A1017	53.336	50.737	2.780	1.00	10.62	A
50	ATOM	7978	CD2	LEU	A1017	55.749	50.828	2.133	1.00	11.90	A
	ATOM	7979	C	LEU	A1017	55.607	46.655	1.024	1.00	11.87	A
	ATOM	7980	O	LEU	A1017	56.252	46.289	2.006	1.00	13.86	A
	ATOM	7981	N	GLN	A1018	55.066	45.794	0.169	1.00	12.59	A
	ATOM	7982	CA	GLN	A1018	55.262	44.359	0.352	1.00	14.35	A
55	ATOM	7983	CB	GLN	A1018	54.001	43.689	0.912	1.00	16.37	A
	ATOM	7984	CG	GLN	A1018	54.197	42.192	1.161	1.00	19.20	A
	ATOM	7985	CD	GLN	A1018	52.916	41.454	1.503	1.00	21.24	A
	ATOM	7986	OE1	GLN	A1018	52.925	40.236	1.694	1.00	23.07	A
	ATOM	7987	NE2	GLN	A1018	51.809	42.182	1.578	1.00	21.22	A

5	ATOM	7988	C	GLN	A1018	55.634	43.680	-0.959	1.00	14.71	A
	ATOM	7989	O	GLN	A1018	55.018	43.933	-1.995	1.00	14.64	A
	ATOM	7990	N	ASN	A1019	56.647	42.819	-0.914	1.00	15.34	A
	ATOM	7991	CA	ASN	A1019	57.069	42.092	-2.104	1.00	16.71	A
	ATOM	7992	CB	ASN	A1019	58.536	41.665	-1.989	1.00	17.63	A
10	ATOM	7993	CG	ASN	A1019	59.475	42.847	-1.852	1.00	19.02	A
	ATOM	7994	OD1	ASN	A1019	59.322	43.858	-2.540	1.00	19.65	A
	ATOM	7995	ND2	ASN	A1019	60.462	42.722	-0.971	1.00	19.85	A
	ATOM	7996	C	ASN	A1019	56.178	40.867	-2.253	1.00	17.34	A
	ATOM	7997	O	ASN	A1019	56.054	40.063	-1.327	1.00	18.14	A
15	ATOM	7998	N	LEU	A1020	55.564	40.727	-3.422	1.00	17.74	A
	ATOM	7999	CA	LEU	A1020	54.657	39.618	-3.685	1.00	18.66	A
	ATOM	8000	CB	LEU	A1020	53.373	40.144	-4.331	1.00	18.41	A
	ATOM	8001	CG	LEU	A1020	52.582	41.198	-3.551	1.00	17.65	A
	ATOM	8002	CD1	LEU	A1020	51.433	41.703	-4.405	1.00	18.32	A
20	ATOM	8003	CD2	LEU	A1020	52.064	40.602	-2.251	1.00	17.91	A
	ATOM	8004	C	LEU	A1020	55.249	38.527	-4.571	1.00	19.82	A
	ATOM	8005	O	LEU	A1020	54.851	37.363	-4.474	1.00	20.37	A
	ATOM	8006	N	GLU	A1021	56.190	38.900	-5.432	1.00	20.85	A
	ATOM	8007	CA	GLU	A1021	56.808	37.942	-6.347	1.00	22.64	A
25	ATOM	8008	CB	GLU	A1021	55.947	37.778	-7.601	1.00	24.55	A
	ATOM	8009	CG	GLU	A1021	54.627	37.066	-7.415	1.00	27.54	A
	ATOM	8010	CD	GLU	A1021	53.845	36.990	-8.713	1.00	29.04	A
	ATOM	8011	OE1	GLU	A1021	54.450	36.632	-9.746	1.00	29.72	A
	ATOM	8012	OE2	GLU	A1021	52.631	37.283	-8.701	1.00	30.41	A
30	ATOM	8013	C	GLU	A1021	58.207	38.331	-6.804	1.00	22.88	A
	ATOM	8014	O	GLU	A1021	58.474	39.494	-7.100	1.00	21.59	A
	ATOM	8015	N	HIS	A1022	59.093	37.343	-6.870	1.00	23.24	A
	ATOM	8016	CA	HIS	A1022	60.451	37.559	-7.348	1.00	24.68	A
	ATOM	8017	CB	HIS	A1022	61.438	36.663	-6.595	1.00	25.87	A
35	ATOM	8018	CG	HIS	A1022	62.860	36.831	-7.032	1.00	27.45	A
	ATOM	8019	CD2	HIS	A1022	63.768	35.930	-7.477	1.00	28.54	A
	ATOM	8020	ND1	HIS	A1022	63.500	38.052	-7.033	1.00	28.74	A
	ATOM	8021	CE1	HIS	A1022	64.740	37.896	-7.460	1.00	29.03	A
	ATOM	8022	NE2	HIS	A1022	64.929	36.618	-7.736	1.00	29.19	A
40	ATOM	8023	C	HIS	A1022	60.359	37.146	-8.813	1.00	24.90	A
	ATOM	8024	O	HIS	A1022	60.105	35.982	-9.122	1.00	25.14	A
	ATOM	8025	N	LEU	A1023	60.549	38.104	-9.711	1.00	25.03	A
	ATOM	8026	CA	LEU	A1023	60.432	37.846	-11.140	1.00	26.27	A
	ATOM	8027	CB	LEU	A1023	59.975	39.124	-11.843	1.00	25.95	A
45	ATOM	8028	CG	LEU	A1023	58.679	39.705	-11.267	1.00	25.51	A
	ATOM	8029	CD1	LEU	A1023	58.382	41.052	-11.901	1.00	25.87	A
	ATOM	8030	CD2	LEU	A1023	57.537	38.728	-11.506	1.00	26.07	A
	ATOM	8031	C	LEU	A1023	61.685	37.303	-11.816	1.00	27.30	A
	ATOM	8032	O	LEU	A1023	62.747	37.924	-11.778	1.00	26.61	A
50	ATOM	8033	N	ASP	A1024	61.546	36.139	-12.443	1.00	29.41	A
	ATOM	8034	CA	ASP	A1024	62.659	35.509	-13.143	1.00	31.40	A
	ATOM	8035	CB	ASP	A1024	62.283	34.091	-13.582	1.00	33.04	A
	ATOM	8036	CG	ASP	A1024	62.251	33.111	-12.424	1.00	34.34	A
	ATOM	8037	OD1	ASP	A1024	61.961	31.919	-12.661	1.00	35.68	A
55	ATOM	8038	OD2	ASP	A1024	62.521	33.529	-11.278	1.00	35.28	A
	ATOM	8039	C	ASP	A1024	63.049	36.336	-14.358	1.00	32.07	A
	ATOM	8040	O	ASP	A1024	62.202	36.977	-14.985	1.00	32.21	A
	ATOM	8041	N	GLY	A1025	64.336	36.318	-14.686	1.00	32.46	A
	ATOM	8042	CA	GLY	A1025	64.816	37.080	-15.821	1.00	33.39	A

5	ATOM	8043	C	GLY	A1025	64.726	38.564	-15.534	1.00	33.83	A
	ATOM	8044	O	GLY	A1025	65.055	39.392	-16.382	1.00	33.62	A
	ATOM	8045	N	MSE	A1026	64.277	38.894	-14.326	1.00	34.40	A
	ATOM	8046	CA	MSE	A1026	64.133	40.281	-13.904	1.00	35.14	A
	ATOM	8047	CB	MSE	A1026	65.504	40.943	-13.809	1.00	38.95	A
10	ATOM	8048	CG	MSE	A1026	66.467	40.210	-12.900	1.00	43.37	A
	ATOM	8049	SE	MSE	A1026	68.190	41.048	-12.869	1.00	48.57	A
	ATOM	8050	CE	MSE	A1026	68.959	40.193	-14.422	1.00	46.31	A
	ATOM	8051	C	MSE	A1026	63.260	41.041	-14.890	1.00	33.31	A
	ATOM	8052	O	MSE	A1026	63.493	42.218	-15.166	1.00	32.52	A
15	ATOM	8053	N	VAL	A1027	62.254	40.358	-15.420	1.00	31.46	A
	ATOM	8054	CA	VAL	A1027	61.348	40.965	-16.380	1.00	30.23	A
	ATOM	8055	CB	VAL	A1027	61.201	40.088	-17.639	1.00	30.01	A
	ATOM	8056	CG1	VAL	A1027	60.185	40.706	-18.591	1.00	29.55	A
	ATOM	8057	CG2	VAL	A1027	62.547	39.942	-18.326	1.00	29.41	A
20	ATOM	8058	C	VAL	A1027	59.969	41.185	-15.778	1.00	29.79	A
	ATOM	8059	O	VAL	A1027	59.340	40.252	-15.280	1.00	29.23	A
	ATOM	8060	N	ALA	A1028	59.508	42.430	-15.821	1.00	28.92	A
	ATOM	8061	CA	ALA	A1028	58.194	42.773	-15.298	1.00	28.80	A
	ATOM	8062	CB	ALA	A1028	58.184	44.213	-14.799	1.00	28.67	A
25	ATOM	8063	C	ALA	A1028	57.189	42.600	-16.428	1.00	28.40	A
	ATOM	8064	O	ALA	A1028	57.167	43.387	-17.373	1.00	28.55	A
	ATOM	8065	N	PRO	A1029	56.354	41.554	-16.353	1.00	27.78	A
	ATOM	8066	CD	PRO	A1029	56.301	40.519	-15.304	1.00	27.81	A
	ATOM	8067	CA	PRO	A1029	55.350	41.298	-17.390	1.00	27.71	A
30	ATOM	8068	CB	PRO	A1029	54.858	39.895	-17.047	1.00	28.01	A
	ATOM	8069	CG	PRO	A1029	54.958	39.870	-15.559	1.00	28.02	A
	ATOM	8070	C	PRO	A1029	54.226	42.329	-17.378	1.00	27.12	A
	ATOM	8071	O	PRO	A1029	53.868	42.859	-16.327	1.00	27.82	A
	ATOM	8072	N	GLU	A1030	53.674	42.618	-18.551	1.00	26.11	A
35	ATOM	8073	CA	GLU	A1030	52.591	43.585	-18.643	1.00	24.92	A
	ATOM	8074	CB	GLU	A1030	52.275	43.902	-20.106	1.00	25.04	A
	ATOM	8075	CG	GLU	A1030	53.484	44.338	-20.920	1.00	25.00	A
	ATOM	8076	CD	GLU	A1030	53.107	44.817	-22.307	1.00	25.45	A
	ATOM	8077	OE1	GLU	A1030	52.177	44.237	-22.903	1.00	26.43	A
40	ATOM	8078	OE2	GLU	A1030	53.749	45.765	-22.806	1.00	24.53	A
	ATOM	8079	C	GLU	A1030	51.357	43.019	-17.953	1.00	23.99	A
	ATOM	8080	O	GLU	A1030	51.256	41.810	-17.731	1.00	25.08	A
	ATOM	8081	N	VAL	A1031	50.418	43.896	-17.618	1.00	22.66	A
	ATOM	8082	CA	VAL	A1031	49.204	43.480	-16.933	1.00	20.61	A
45	ATOM	8083	CB	VAL	A1031	48.801	44.515	-15.860	1.00	21.38	A
	ATOM	8084	CG1	VAL	A1031	49.925	44.673	-14.851	1.00	21.76	A
	ATOM	8085	CG2	VAL	A1031	48.487	45.847	-16.508	1.00	20.47	A
	ATOM	8086	C	VAL	A1031	48.022	43.257	-17.869	1.00	19.15	A
	ATOM	8087	O	VAL	A1031	48.063	43.621	-19.044	1.00	19.47	A
50	ATOM	8088	N	CYS	A1032	46.974	42.649	-17.326	1.00	17.67	A
	ATOM	8089	CA	CYS	A1032	45.755	42.352	-18.069	1.00	16.55	A
	ATOM	8090	C	CYS	A1032	44.838	43.566	-18.141	1.00	14.35	A
	ATOM	8091	O	CYS	A1032	45.002	44.520	-17.384	1.00	12.80	A
	ATOM	8092	CB	CYS	A1032	44.989	41.225	-17.384	1.00	17.91	A
55	ATOM	8093	SG	CYS	A1032	45.736	39.571	-17.486	1.00	21.70	A
	ATOM	8094	N	PRO	A1033	43.854	43.544	-19.056	1.00	13.48	A
	ATOM	8095	CD	PRO	A1033	43.599	42.542	-20.108	1.00	13.27	A
	ATOM	8096	CA	PRO	A1033	42.927	44.672	-19.176	1.00	12.75	A
	ATOM	8097	CB	PRO	A1033	41.964	44.212	-20.270	1.00	13.14	A

5	ATOM	8098	CG	PRO	A1033	42.837	43.346	-21.136	1.00	13.23	A
	ATOM	8099	C	PRO	A1033	42.210	44.914	-17.844	1.00	12.09	A
	ATOM	8100	O	PRO	A1033	41.721	43.974	-17.209	1.00	11.14	A
	ATOM	8101	N	MSE	A1034	42.161	46.181	-17.442	1.00	11.64	A
	ATOM	8102	CA	MSE	A1034	41.531	46.631	-16.201	1.00	12.45	A
	ATOM	8103	CB	MSE	A1034	40.099	46.099	-16.084	1.00	12.75	A
	ATOM	8104	CG	MSE	A1034	39.156	46.629	-17.161	1.00	13.48	A
	ATOM	8105	SE	MSE	A1034	39.229	48.559	-17.394	1.00	18.29	A
10	ATOM	8106	CE	MSE	A1034	38.290	49.085	-15.785	1.00	15.04	A
	ATOM	8107	C	MSE	A1034	42.320	46.266	-14.950	1.00	13.04	A
	ATOM	8108	O	MSE	A1034	41.844	46.460	-13.833	1.00	15.57	A
	ATOM	8109	N	GLU	A1035	43.530	45.753	-15.139	1.00	12.47	A
	ATOM	8110	CA	GLU	A1035	44.379	45.385	-14.016	1.00	12.77	A
	ATOM	8111	CB	GLU	A1035	45.068	44.040	-14.282	1.00	15.80	A
15	ATOM	8112	CG	GLU	A1035	46.248	43.751	-13.359	1.00	20.78	A
	ATOM	8113	CD	GLU	A1035	46.741	42.316	-13.450	1.00	22.65	A
	ATOM	8114	OE1	GLU	A1035	47.035	41.843	-14.571	1.00	23.74	A
	ATOM	8115	OE2	GLU	A1035	46.841	41.661	-12.390	1.00	24.85	A
20	ATOM	8116	C	GLU	A1035	45.429	46.460	-13.773	1.00	11.49	A
	ATOM	8117	O	GLU	A1035	45.795	47.205	-14.680	1.00	10.22	A
	ATOM	8118	N	THR	A1036	45.893	46.536	-12.531	1.00	10.28	A
	ATOM	8119	CA	THR	A1036	46.919	47.483	-12.125	1.00	9.92	A
	ATOM	8120	CB	THR	A1036	46.343	48.607	-11.245	1.00	9.77	A
	ATOM	8121	OG1	THR	A1036	45.278	49.264	-11.937	1.00	10.21	A
25	ATOM	8122	CG2	THR	A1036	47.418	49.629	-10.914	1.00	10.57	A
	ATOM	8123	C	THR	A1036	47.906	46.678	-11.293	1.00	9.13	A
	ATOM	8124	O	THR	A1036	47.502	45.935	-10.400	1.00	10.16	A
	ATOM	8125	N	ALA	A1037	49.192	46.817	-11.594	1.00	9.44	A
30	ATOM	8126	CA	ALA	A1037	50.225	46.096	-10.865	1.00	9.72	A
	ATOM	8127	CB	ALA	A1037	50.747	44.937	-11.705	1.00	10.95	A
	ATOM	8128	C	ALA	A1037	51.361	47.046	-10.537	1.00	9.84	A
	ATOM	8129	O	ALA	A1037	51.516	48.081	-11.177	1.00	10.76	A
	ATOM	8130	N	ALA	A1038	52.152	46.693	-9.533	1.00	9.36	A
	ATOM	8131	CA	ALA	A1038	53.283	47.515	-9.144	1.00	8.90	A
35	ATOM	8132	CB	ALA	A1038	53.073	48.080	-7.747	1.00	8.87	A
	ATOM	8133	C	ALA	A1038	54.534	46.656	-9.180	1.00	8.90	A
	ATOM	8134	O	ALA	A1038	54.497	45.481	-8.813	1.00	7.98	A
	ATOM	8135	N	TYR	A1039	55.634	47.245	-9.635	1.00	9.04	A
40	ATOM	8136	CA	TYR	A1039	56.903	46.540	-9.707	1.00	10.18	A
	ATOM	8137	CB	TYR	A1039	57.248	46.177	-11.151	1.00	10.53	A
	ATOM	8138	CG	TYR	A1039	56.243	45.288	-11.837	1.00	11.78	A
	ATOM	8139	CD1	TYR	A1039	55.324	45.813	-12.746	1.00	12.61	A
	ATOM	8140	CE1	TYR	A1039	54.405	44.990	-13.394	1.00	14.80	A
	ATOM	8141	CD2	TYR	A1039	56.216	43.918	-11.589	1.00	12.35	A
45	ATOM	8142	CE2	TYR	A1039	55.301	43.089	-12.228	1.00	13.71	A
	ATOM	8143	CZ	TYR	A1039	54.401	43.632	-13.131	1.00	15.21	A
	ATOM	8144	OH	TYR	A1039	53.508	42.815	-13.783	1.00	17.85	A
	ATOM	8145	C	TYR	A1039	58.009	47.422	-9.164	1.00	10.60	A
	ATOM	8146	O	TYR	A1039	57.950	48.644	-9.269	1.00	11.19	A
	ATOM	8147	N	VAL	A1040	59.019	46.795	-8.575	1.00	10.57	A
50	ATOM	8148	CA	VAL	A1040	60.158	47.529	-8.058	1.00	10.83	A
	ATOM	8149	CB	VAL	A1040	60.223	47.503	-6.513	1.00	10.80	A
	ATOM	8150	CG1	VAL	A1040	61.527	48.144	-6.034	1.00	10.81	A
	ATOM	8151	CG2	VAL	A1040	59.039	48.259	-5.934	1.00	11.19	A
55	ATOM	8152	C	VAL	A1040	61.414	46.884	-8.615	1.00	11.68	A

5	ATOM	8153	O	VAL	A1040	61.634	45.681	-8.454	1.00	12.74	A
	ATOM	8154	N	SER	A1041	62.221	47.680	-9.303	1.00	11.34	A
	ATOM	8155	CA	SER	A1041	63.465	47.174	-9.855	1.00	12.00	A
	ATOM	8156	CB	SER	A1041	63.679	47.700	-11.281	1.00	12.02	A
	ATOM	8157	OG	SER	A1041	63.674	49.114	-11.326	1.00	13.73	A
10	ATOM	8158	C	SER	A1041	64.600	47.627	-8.947	1.00	12.06	A
	ATOM	8159	O	SER	A1041	64.608	48.759	-8.464	1.00	11.83	A
	ATOM	8160	N	SER	A1042	65.544	46.726	-8.695	1.00	12.11	A
	ATOM	8161	CA	SER	A1042	66.696	47.038	-7.858	1.00	12.84	A
	ATOM	8162	CB	SER	A1042	66.899	45.959	-6.793	1.00	11.51	A
15	ATOM	8163	OG	SER	A1042	65.783	45.904	-5.918	1.00	14.87	A
	ATOM	8164	C	SER	A1042	67.906	47.117	-8.772	1.00	13.04	A
	ATOM	8165	O	SER	A1042	68.061	46.301	-9.682	1.00	14.12	A
	ATOM	8166	N	HIS	A1043	68.757	48.106	-8.530	1.00	14.49	A
	ATOM	8167	CA	HIS	A1043	69.931	48.318	-9.363	1.00	15.99	A
20	ATOM	8168	CB	HIS	A1043	69.709	49.582	-10.193	1.00	15.32	A
	ATOM	8169	CG	HIS	A1043	68.402	49.585	-10.922	1.00	14.89	A
	ATOM	8170	CD2	HIS	A1043	67.158	49.931	-10.514	1.00	13.91	A
	ATOM	8171	ND1	HIS	A1043	68.260	49.088	-12.199	1.00	14.17	A
	ATOM	8172	CE1	HIS	A1043	66.986	49.125	-12.547	1.00	15.10	A
25	ATOM	8173	NE2	HIS	A1043	66.296	49.631	-11.540	1.00	14.41	A
	ATOM	8174	C	HIS	A1043	71.199	48.425	-8.530	1.00	17.89	A
	ATOM	8175	O	HIS	A1043	71.251	49.156	-7.541	1.00	17.26	A
	ATOM	8176	N	SER	A1044	72.220	47.684	-8.943	1.00	20.49	A
	ATOM	8177	CA	SER	A1044	73.493	47.666	-8.237	1.00	23.36	A
30	ATOM	8178	CB	SER	A1044	74.196	46.327	-8.480	1.00	23.82	A
	ATOM	8179	OG	SER	A1044	74.218	46.009	-9.862	1.00	25.95	A
	ATOM	8180	C	SER	A1044	74.404	48.813	-8.649	1.00	24.24	A
	ATOM	8181	O	SER	A1044	74.018	49.585	-9.554	1.00	24.99	A
	ATOM	8182	OXT	SER	A1044	75.497	48.922	-8.053	1.00	25.64	A
35	ATOM	8183	OH2	WAT	W 2	42.042	63.477	-7.164	1.00	6.41	W
	ATOM	8184	OH2	WAT	W 3	53.550	64.836	-19.873	1.00	8.14	W
	ATOM	8185	OH2	WAT	W 4	39.197	62.878	-19.106	1.00	7.97	W
	ATOM	8186	OH2	WAT	W 5	52.209	54.085	-4.846	1.00	8.40	W
	ATOM	8187	OH2	WAT	W 6	56.128	53.417	-0.630	1.00	8.30	W
40	ATOM	8188	OH2	WAT	W 7	31.282	49.937	-23.972	1.00	10.14	W
	ATOM	8189	OH2	WAT	W 8	49.807	48.483	1.372	1.00	9.31	W
	ATOM	8190	OH2	WAT	W 9	36.893	57.648	13.387	1.00	9.61	W
	ATOM	8191	OH2	WAT	W 10	26.802	68.971	-9.206	1.00	9.53	W
	ATOM	8192	OH2	WAT	W 11	39.233	64.818	-14.778	1.00	10.18	W
45	ATOM	8193	OH2	WAT	W 12	34.214	58.561	-8.785	1.00	7.85	W
	ATOM	8194	OH2	WAT	W 13	61.037	59.682	-8.191	1.00	8.41	W
	ATOM	8195	OH2	WAT	W 14	36.556	72.572	0.269	1.00	10.25	W
	ATOM	8196	OH2	WAT	W 15	31.717	47.036	-8.074	1.00	8.83	W
	ATOM	8197	OH2	WAT	W 16	30.129	55.760	17.242	1.00	9.77	W
50	ATOM	8198	OH2	WAT	W 17	26.161	49.593	-13.680	1.00	9.92	W
	ATOM	8199	OH2	WAT	W 18	37.670	52.088	-21.093	1.00	11.68	W
	ATOM	8200	OH2	WAT	W 19	33.074	62.758	0.070	1.00	7.76	W
	ATOM	8201	OH2	WAT	W 20	24.794	52.920	-11.748	1.00	8.84	W
	ATOM	8202	OH2	WAT	W 21	63.100	61.310	-7.515	1.00	9.52	W
55	ATOM	8203	OH2	WAT	W 22	41.220	59.000	13.470	1.00	11.28	W
	ATOM	8204	OH2	WAT	W 23	47.214	55.792	-15.391	1.00	16.11	W
	ATOM	8205	OH2	WAT	W 24	56.347	55.690	-2.127	1.00	9.59	W
	ATOM	8206	OH2	WAT	W 25	67.413	60.727	-5.662	1.00	12.47	W
	ATOM	8207	OH2	WAT	W 26	26.340	48.895	-10.998	1.00	9.95	W

5	ATOM	8208	OH2	WAT	W	27	65.658	60.301	-7.681	1.00	9.86	W
	ATOM	8209	OH2	WAT	W	28	32.556	60.049	-1.797	1.00	9.32	W
	ATOM	8210	OH2	WAT	W	29	20.112	54.723	16.205	1.00	11.76	W
	ATOM	8211	OH2	WAT	W	30	23.748	55.505	-23.327	1.00	10.76	W
	ATOM	8212	OH2	WAT	W	31	39.332	57.340	14.891	1.00	9.99	W
10	ATOM	8213	OH2	WAT	W	32	20.372	58.804	-21.924	1.00	10.68	W
	ATOM	8214	OH2	WAT	W	33	28.005	60.998	19.501	1.00	12.43	W
	ATOM	8215	OH2	WAT	W	34	34.100	56.345	-26.283	1.00	8.61	W
	ATOM	8216	OH2	WAT	W	35	26.313	40.065	7.967	1.00	12.45	W
	ATOM	8217	OH2	WAT	W	36	63.802	50.178	-14.014	1.00	12.29	W
15	ATOM	8218	OH2	WAT	W	37	37.571	56.991	1.737	1.00	9.76	W
	ATOM	8219	OH2	WAT	W	38	24.021	41.933	6.905	1.00	11.36	W
	ATOM	8220	OH2	WAT	W	39	31.878	65.446	18.975	1.00	15.13	W
	ATOM	8221	OH2	WAT	W	40	51.480	56.691	-5.611	1.00	9.26	W
	ATOM	8222	OH2	WAT	W	41	20.134	56.063	7.164	1.00	12.78	W
20	ATOM	8223	OH2	WAT	W	42	28.304	43.888	13.163	1.00	9.88	W
	ATOM	8224	OH2	WAT	W	43	30.243	58.465	-11.811	1.00	8.09	W
	ATOM	8225	OH2	WAT	W	44	64.815	59.321	-3.585	1.00	13.31	W
	ATOM	8226	OH2	WAT	W	45	46.389	67.686	-15.597	1.00	13.23	W
	ATOM	8227	OH2	WAT	W	46	60.782	58.212	-2.813	1.00	11.20	W
25	ATOM	8228	OH2	WAT	W	47	60.514	62.158	-1.234	1.00	13.28	W
	ATOM	8229	OH2	WAT	W	48	53.646	59.923	-9.348	1.00	11.25	W
	ATOM	8230	OH2	WAT	W	49	18.643	51.090	-12.404	1.00	11.27	W
	ATOM	8231	OH2	WAT	W	50	28.831	42.792	-11.918	1.00	11.63	W
	ATOM	8232	OH2	WAT	W	51	34.530	79.088	-9.168	1.00	11.13	W
30	ATOM	8233	OH2	WAT	W	52	21.612	57.986	-7.797	1.00	10.97	W
	ATOM	8234	OH2	WAT	W	53	37.026	71.830	-4.514	1.00	9.38	W
	ATOM	8235	OH2	WAT	W	54	55.613	59.382	-11.500	1.00	8.74	W
	ATOM	8236	OH2	WAT	W	55	36.685	44.923	-5.472	1.00	11.75	W
	ATOM	8237	OH2	WAT	W	56	51.323	53.328	-23.928	1.00	12.92	W
35	ATOM	8238	OH2	WAT	W	57	35.162	50.576	-17.524	1.00	13.57	W
	ATOM	8239	OH2	WAT	W	58	60.531	54.758	-0.381	1.00	14.45	W
	ATOM	8240	OH2	WAT	W	59	42.905	56.765	6.206	1.00	11.63	W
	ATOM	8241	OH2	WAT	W	60	47.859	59.294	-25.663	1.00	13.35	W
	ATOM	8242	OH2	WAT	W	61	37.863	73.312	-2.170	1.00	12.61	W
40	ATOM	8243	OH2	WAT	W	62	19.405	55.246	11.583	1.00	14.08	W
	ATOM	8244	OH2	WAT	W	63	25.931	39.712	5.244	1.00	11.23	W
	ATOM	8245	OH2	WAT	W	64	23.345	54.021	-3.621	1.00	13.72	W
	ATOM	8246	OH2	WAT	W	65	34.262	52.377	-0.944	1.00	9.34	W
	ATOM	8247	OH2	WAT	W	66	51.020	44.292	-8.032	1.00	10.74	W
45	ATOM	8248	OH2	WAT	W	67	37.640	58.989	11.075	1.00	12.29	W
	ATOM	8249	OH2	WAT	W	68	16.554	49.007	24.070	1.00	15.16	W
	ATOM	8250	OH2	WAT	W	69	19.376	53.552	8.216	1.00	12.07	W
	ATOM	8251	OH2	WAT	W	70	11.858	51.549	14.335	1.00	16.74	W
	ATOM	8252	OH2	WAT	W	72	17.143	56.270	10.273	1.00	13.60	W
50	ATOM	8253	OH2	WAT	W	73	68.006	65.561	-3.446	1.00	12.60	W
	ATOM	8254	OH2	WAT	W	75	22.889	53.007	-24.420	1.00	14.72	W
	ATOM	8255	OH2	WAT	W	76	52.059	50.629	6.400	1.00	10.61	W
	ATOM	8256	OH2	WAT	W	77	17.622	52.779	6.356	1.00	11.97	W
	ATOM	8257	OH2	WAT	W	78	68.809	58.261	-5.093	1.00	14.29	W
55	ATOM	8258	OH2	WAT	W	79	33.495	48.113	-10.195	1.00	8.82	W
	ATOM	8259	OH2	WAT	W	80	26.727	41.583	-13.197	1.00	12.70	W
	ATOM	8260	OH2	WAT	W	81	26.797	60.896	-3.250	1.00	10.29	W
	ATOM	8261	OH2	WAT	W	82	49.560	62.285	-8.627	1.00	9.52	W
	ATOM	8262	OH2	WAT	W	83	41.032	52.406	-16.918	1.00	12.51	W

5	ATOM	8263	OH2	WAT	W	84	31.381	76.822	-6.322	1.00	12.79	W
	ATOM	8264	OH2	WAT	W	85	43.389	68.256	-24.999	1.00	14.18	W
	ATOM	8265	OH2	WAT	W	86	32.757	81.026	-11.699	1.00	11.78	W
	ATOM	8266	OH2	WAT	W	87	20.527	66.154	-19.601	1.00	12.21	W
	ATOM	8267	OH2	WAT	W	88	40.275	62.699	6.041	1.00	9.15	W
10	ATOM	8268	OH2	WAT	W	89	42.187	47.294	-24.509	1.00	14.89	W
	ATOM	8269	OH2	WAT	W	90	44.548	41.856	-0.550	1.00	15.24	W
	ATOM	8270	OH2	WAT	W	91	38.578	55.195	-31.685	1.00	14.89	W
	ATOM	8271	OH2	WAT	W	92	22.315	54.352	-12.009	1.00	10.46	W
	ATOM	8272	OH2	WAT	W	93	48.241	89.207	-30.694	1.00	15.15	W
15	ATOM	8273	OH2	WAT	W	94	36.678	51.651	3.739	1.00	11.00	W
	ATOM	8274	OH2	WAT	W	95	38.700	62.268	8.378	1.00	12.20	W
	ATOM	8275	OH2	WAT	W	96	47.482	45.984	3.648	1.00	10.29	W
	ATOM	8276	OH2	WAT	W	97	33.607	57.028	-35.919	1.00	18.29	W
	ATOM	8277	OH2	WAT	W	98	32.325	77.609	-29.636	1.00	13.68	W
20	ATOM	8278	OH2	WAT	W	99	39.188	38.924	17.246	1.00	16.44	W
	ATOM	8279	OH2	WAT	W	100	35.929	53.094	1.324	1.00	10.90	W
	ATOM	8280	OH2	WAT	W	101	14.480	60.026	5.140	1.00	14.27	W
	ATOM	8281	OH2	WAT	W	102	21.754	57.133	5.118	1.00	12.46	W
	ATOM	8282	OH2	WAT	W	103	43.069	48.058	11.256	1.00	12.39	W
25	ATOM	8283	OH2	WAT	W	104	25.920	72.873	5.654	1.00	14.15	W
	ATOM	8284	OH2	WAT	W	105	27.565	48.488	-21.578	1.00	14.53	W
	ATOM	8285	OH2	WAT	W	106	33.286	78.599	-5.099	1.00	12.24	W
	ATOM	8286	OH2	WAT	W	107	50.058	59.512	-11.520	1.00	10.57	W
	ATOM	8287	OH2	WAT	W	108	25.555	51.205	-9.475	1.00	11.34	W
30	ATOM	8288	OH2	WAT	W	109	40.153	56.225	5.779	1.00	12.76	W
	ATOM	8289	OH2	WAT	W	110	14.046	59.725	-3.421	1.00	15.15	W
	ATOM	8290	OH2	WAT	W	111	19.679	53.575	-11.765	1.00	11.58	W
	ATOM	8291	OH2	WAT	W	112	26.397	63.646	17.057	1.00	19.25	W
	ATOM	8292	OH2	WAT	W	113	19.842	57.363	-11.722	1.00	15.86	W
35	ATOM	8293	OH2	WAT	W	114	47.093	48.549	11.513	1.00	16.31	W
	ATOM	8294	OH2	WAT	W	115	67.773	81.656	-25.681	1.00	12.31	W
	ATOM	8295	OH2	WAT	W	116	22.941	51.712	-8.714	1.00	17.21	W
	ATOM	8296	OH2	WAT	W	117	46.531	70.323	-36.707	1.00	15.24	W
	ATOM	8297	OH2	WAT	W	118	20.610	57.442	-5.246	1.00	10.52	W
40	ATOM	8298	OH2	WAT	W	119	18.199	60.639	24.362	1.00	19.10	W
	ATOM	8299	OH2	WAT	W	120	41.329	68.365	-32.493	1.00	14.40	W
	ATOM	8300	OH2	WAT	W	121	38.335	40.047	1.670	1.00	13.35	W
	ATOM	8301	OH2	WAT	W	122	23.833	58.200	6.359	1.00	12.19	W
	ATOM	8302	OH2	WAT	W	123	18.240	59.718	-20.036	1.00	17.38	W
45	ATOM	8303	OH2	WAT	W	124	41.287	77.499	-14.106	1.00	13.36	W
	ATOM	8304	OH2	WAT	W	125	52.832	58.921	-1.733	1.00	12.54	W
	ATOM	8305	OH2	WAT	W	126	47.931	49.566	13.810	1.00	12.59	W
	ATOM	8306	OH2	WAT	W	127	35.204	43.627	28.724	1.00	14.94	W
	ATOM	8307	OH2	WAT	W	128	59.476	60.585	-6.230	1.00	11.38	W
50	ATOM	8308	OH2	WAT	W	129	53.626	72.514	-19.200	1.00	12.06	W
	ATOM	8309	OH2	WAT	W	130	39.684	53.989	-20.753	1.00	14.19	W
	ATOM	8310	OH2	WAT	W	131	33.156	36.626	-4.367	1.00	14.10	W
	ATOM	8311	OH2	WAT	W	132	14.394	63.854	-16.386	1.00	15.65	W
	ATOM	8312	OH2	WAT	W	133	47.541	42.987	-2.387	1.00	16.31	W
55	ATOM	8313	OH2	WAT	W	134	46.862	55.823	-25.401	1.00	15.03	W
	ATOM	8314	OH2	WAT	W	136	32.224	58.564	-28.544	1.00	13.45	W
	ATOM	8315	OH2	WAT	W	137	49.223	49.949	28.325	1.00	19.29	W
	ATOM	8316	OH2	WAT	W	138	26.323	37.326	29.416	1.00	19.14	W
	ATOM	8317	OH2	WAT	W	139	51.830	46.524	1.295	1.00	12.33	W

5	ATOM	8373	OH2	WAT	W	195	13.135	66.801	-4.751	1.00	16.44	W
	ATOM	8374	OH2	WAT	W	197	24.508	39.081	-11.494	1.00	20.79	W
	ATOM	8375	OH2	WAT	W	198	41.658	61.212	-29.773	1.00	17.50	W
	ATOM	8376	OH2	WAT	W	199	27.188	41.368	13.298	1.00	15.13	W
	ATOM	8377	OH2	WAT	W	200	42.058	87.798	-40.915	1.00	15.24	W
10	ATOM	8378	OH2	WAT	W	201	70.003	69.894	-12.626	1.00	14.74	W
	ATOM	8379	OH2	WAT	W	202	64.179	77.927	-35.248	1.00	14.07	W
	ATOM	8380	OH2	WAT	W	203	20.804	65.342	7.755	1.00	17.03	W
	ATOM	8381	OH2	WAT	W	204	11.345	61.251	-18.469	1.00	19.28	W
	ATOM	8382	OH2	WAT	W	205	24.586	70.556	-8.728	1.00	13.10	W
15	ATOM	8383	OH2	WAT	W	206	25.042	40.064	14.311	1.00	17.71	W
	ATOM	8384	OH2	WAT	W	207	22.658	63.257	-33.219	1.00	18.83	W
	ATOM	8385	OH2	WAT	W	208	41.629	43.251	7.933	1.00	14.67	W
	ATOM	8386	OH2	WAT	W	209	20.931	51.833	47.478	1.00	16.92	W
	ATOM	8387	OH2	WAT	W	210	41.310	50.343	33.238	1.00	20.76	W
20	ATOM	8388	OH2	WAT	W	211	45.951	52.717	-19.108	1.00	16.03	W
	ATOM	8389	OH2	WAT	W	212	51.426	76.342	-40.924	1.00	25.44	W
	ATOM	8390	OH2	WAT	W	213	25.622	86.174	-31.896	1.00	16.09	W
	ATOM	8391	OH2	WAT	W	214	12.541	56.291	5.425	1.00	17.15	W
	ATOM	8392	OH2	WAT	W	215	22.523	56.813	-34.105	1.00	17.30	W
25	ATOM	8393	OH2	WAT	W	216	43.796	72.560	-41.912	1.00	18.18	W
	ATOM	8394	OH2	WAT	W	217	44.637	58.659	-15.909	1.00	16.17	W
	ATOM	8395	OH2	WAT	W	218	31.266	81.750	0.557	1.00	18.18	W
	ATOM	8396	OH2	WAT	W	219	52.052	56.397	-30.316	1.00	20.40	W
	ATOM	8397	OH2	WAT	W	220	17.201	70.010	-23.298	1.00	21.76	W
30	ATOM	8398	OH2	WAT	W	221	37.700	46.928	29.873	1.00	18.65	W
	ATOM	8399	OH2	WAT	W	222	49.781	55.079	-29.054	1.00	18.35	W
	ATOM	8400	OH2	WAT	W	223	36.227	79.122	-4.990	1.00	18.76	W
	ATOM	8401	OH2	WAT	W	224	62.292	62.423	25.645	1.00	21.53	W
	ATOM	8402	OH2	WAT	W	225	11.410	53.122	6.820	1.00	16.14	W
35	ATOM	8403	OH2	WAT	W	226	13.875	60.774	-22.493	1.00	17.65	W
	ATOM	8404	OH2	WAT	W	227	50.785	61.911	26.371	1.00	20.81	W
	ATOM	8405	OH2	WAT	W	228	68.609	78.746	-18.153	1.00	20.98	W
	ATOM	8406	OH2	WAT	W	229	84.248	68.254	-17.382	1.00	16.45	W
	ATOM	8407	OH2	WAT	W	230	21.921	40.287	-8.763	1.00	25.24	W
40	ATOM	8408	OH2	WAT	W	231	52.792	69.689	18.337	1.00	23.67	W
	ATOM	8409	OH2	WAT	W	233	42.635	53.302	35.623	1.00	21.27	W
	ATOM	8410	OH2	WAT	W	234	70.643	52.132	-12.652	1.00	19.68	W
	ATOM	8411	OH2	WAT	W	235	34.668	70.219	13.058	1.00	21.89	W
	ATOM	8412	OH2	WAT	W	236	27.265	46.404	13.634	1.00	16.31	W
45	ATOM	8413	OH2	WAT	W	237	14.320	49.792	19.854	1.00	16.31	W
	ATOM	8414	OH2	WAT	W	238	49.691	73.425	-21.732	1.00	21.90	W
	ATOM	8415	OH2	WAT	W	239	48.829	44.275	-6.153	1.00	18.55	W
	ATOM	8416	OH2	WAT	W	240	61.398	76.794	-39.730	1.00	19.88	W
	ATOM	8417	OH2	WAT	W	241	22.807	78.638	-30.326	1.00	23.15	W
50	ATOM	8418	OH2	WAT	W	242	43.596	88.461	-38.551	1.00	15.45	W
	ATOM	8419	OH2	WAT	W	243	35.783	77.456	-7.287	1.00	14.79	W
	ATOM	8420	OH2	WAT	W	244	24.815	68.296	21.838	1.00	19.19	W
	ATOM	8421	OH2	WAT	W	245	68.075	49.207	-1.108	1.00	19.95	W
	ATOM	8422	OH2	WAT	W	246	54.280	47.750	15.537	1.00	20.36	W
55	ATOM	8423	OH2	WAT	W	247	55.069	50.670	16.796	1.00	24.95	W
	ATOM	8424	OH2	WAT	W	248	39.430	48.768	-32.780	1.00	23.67	W
	ATOM	8425	OH2	WAT	W	249	22.569	45.303	-13.489	1.00	19.28	W
	ATOM	8426	OH2	WAT	W	250	67.180	55.272	0.972	1.00	14.46	W
	ATOM	8427	OH2	WAT	W	251	47.980	44.000	-8.660	1.00	18.47	W

5	ATOM	8428	OH2	WAT	W	252	26.921	87.791	-23.599	1.00	22.16	W
	ATOM	8429	OH2	WAT	W	253	18.923	48.496	37.716	1.00	19.77	W
	ATOM	8430	OH2	WAT	W	254	83.559	67.682	-22.775	1.00	25.26	W
10	ATOM	8431	OH2	WAT	W	255	42.958	59.618	-18.847	1.00	23.27	W
	ATOM	8432	OH2	WAT	W	256	47.414	79.105	-40.375	1.00	19.23	W
	ATOM	8433	OH2	WAT	W	258	8.630	57.709	-6.814	1.00	21.71	W
15	ATOM	8434	OH2	WAT	W	259	54.925	90.238	-23.447	1.00	24.47	W
	ATOM	8435	OH2	WAT	W	260	27.570	36.487	-19.572	1.00	23.33	W
	ATOM	8436	OH2	WAT	W	261	72.138	58.735	-11.226	1.00	25.73	W
20	ATOM	8437	OH2	WAT	W	262	34.255	67.576	12.146	1.00	16.16	W
	ATOM	8438	OH2	WAT	W	263	11.762	59.422	-4.906	1.00	19.04	W
	ATOM	8439	OH2	WAT	W	264	23.706	45.995	-15.875	1.00	18.11	W
25	ATOM	8440	OH2	WAT	W	265	50.139	70.863	-17.624	1.00	21.18	W
	ATOM	8441	OH2	WAT	W	266	45.026	90.016	-25.430	1.00	19.76	W
	ATOM	8442	OH2	WAT	W	267	16.075	72.079	-18.963	1.00	21.64	W
30	ATOM	8443	OH2	WAT	W	268	20.115	52.673	-24.264	1.00	18.48	W
	ATOM	8444	OH2	WAT	W	269	59.537	76.497	-8.952	1.00	18.23	W
	ATOM	8445	OH2	WAT	W	270	66.843	60.061	-27.172	1.00	20.64	W
35	ATOM	8446	OH2	WAT	W	271	38.606	51.471	-29.882	1.00	24.46	W
	ATOM	8447	OH2	WAT	W	272	40.396	82.765	-10.648	1.00	14.99	W
	ATOM	8448	OH2	WAT	W	273	42.125	48.704	31.281	1.00	17.97	W
40	ATOM	8449	OH2	WAT	W	274	24.053	52.876	-5.945	1.00	25.34	W
	ATOM	8450	OH2	WAT	W	275	53.271	47.132	-25.039	1.00	18.91	W
	ATOM	8451	OH2	WAT	W	277	32.411	89.129	-43.013	1.00	24.77	W
45	ATOM	8452	OH2	WAT	W	278	36.026	36.057	-4.541	1.00	19.29	W
	ATOM	8453	OH2	WAT	W	279	70.071	82.956	-29.789	1.00	21.14	W
	ATOM	8454	OH2	WAT	W	280	49.683	82.456	-43.824	1.00	19.21	W
50	ATOM	8455	OH2	WAT	W	281	68.342	79.734	-34.832	1.00	23.24	W
	ATOM	8456	OH2	WAT	W	282	29.226	46.817	37.090	1.00	20.39	W
	ATOM	8457	OH2	WAT	W	283	18.522	69.968	4.257	1.00	15.36	W
55	ATOM	8458	OH2	WAT	W	284	14.166	68.276	-7.752	1.00	18.68	W
	ATOM	8459	OH2	WAT	W	285	50.272	72.263	9.147	1.00	23.64	W
	ATOM	8460	OH2	WAT	W	286	39.675	75.625	-40.325	1.00	19.11	W
60	ATOM	8461	OH2	WAT	W	287	28.646	65.114	19.694	1.00	17.93	W
	ATOM	8462	OH2	WAT	W	288	11.705	58.754	7.964	1.00	21.41	W
	ATOM	8463	OH2	WAT	W	289	52.597	79.046	-17.448	1.00	22.13	W
65	ATOM	8464	OH2	WAT	W	290	18.473	64.964	-26.958	1.00	19.14	W
	ATOM	8465	OH2	WAT	W	291	44.625	79.359	-33.259	1.00	19.78	W
	ATOM	8466	OH2	WAT	W	292	36.100	80.964	6.342	1.00	17.11	W
70	ATOM	8467	OH2	WAT	W	293	16.566	60.591	-28.155	1.00	19.52	W
	ATOM	8468	OH2	WAT	W	294	29.722	87.215	-17.892	1.00	28.58	W
	ATOM	8469	OH2	WAT	W	295	8.813	55.020	-6.064	1.00	20.11	W
75	ATOM	8470	OH2	WAT	W	296	46.636	61.696	-25.945	1.00	20.16	W
	ATOM	8471	OH2	WAT	W	297	42.898	82.218	-9.891	1.00	24.94	W
	ATOM	8472	OH2	WAT	W	298	10.335	50.645	18.833	1.00	25.27	W
80	ATOM	8473	OH2	WAT	W	299	12.852	42.541	12.566	1.00	17.91	W
	ATOM	8474	OH2	WAT	W	300	35.895	45.124	30.854	1.00	20.00	W
	ATOM	8475	OH2	WAT	W	301	15.792	75.161	-11.626	1.00	21.01	W
85	ATOM	8476	OH2	WAT	W	302	25.222	46.928	-20.840	1.00	23.20	W
	ATOM	8477	OH2	WAT	W	303	56.890	64.828	24.222	1.00	25.71	W
	ATOM	8478	OH2	WAT	W	304	38.567	94.125	-41.997	1.00	22.28	W
90	ATOM	8479	OH2	WAT	W	305	34.734	59.452	-34.927	1.00	19.36	W
	ATOM	8480	OH2	WAT	W	306	33.032	41.250	-17.616	1.00	25.42	W
	ATOM	8481	OH2	WAT	W	307	20.752	42.619	-7.465	1.00	17.80	W
95	ATOM	8482	OH2	WAT	W	308	19.062	76.610	4.854	1.00	27.92	W

5	ATOM	8483	OH2	WAT	W	309	43.300	80.722	5.014	1.00	22.89	W
	ATOM	8484	OH2	WAT	W	310	32.873	85.309	-5.565	1.00	20.83	W
	ATOM	8485	OH2	WAT	W	311	31.185	33.495	2.792	1.00	24.76	W
	ATOM	8486	OH2	WAT	W	312	21.436	78.463	-1.341	1.00	20.14	W
	ATOM	8487	OH2	WAT	W	313	55.286	59.005	3.952	1.00	16.44	W
	ATOM	8488	OH2	WAT	W	314	13.406	62.292	-19.877	1.00	20.13	W
	ATOM	8489	OH2	WAT	W	315	16.922	50.824	-19.239	1.00	24.71	W
10	ATOM	8490	OH2	WAT	W	316	14.323	62.818	-12.022	1.00	20.05	W
	ATOM	8491	OH2	WAT	W	317	53.131	86.670	-21.375	1.00	24.00	W
	ATOM	8492	OH2	WAT	W	318	70.984	49.511	-0.110	1.00	23.19	W
	ATOM	8493	OH2	WAT	W	319	58.047	42.402	1.566	1.00	23.65	W
	ATOM	8494	OH2	WAT	W	320	74.768	76.369	-14.340	1.00	27.79	W
	ATOM	8495	OH2	WAT	W	321	24.787	83.128	-16.877	1.00	20.99	W
	ATOM	8496	OH2	WAT	W	322	56.915	67.700	-35.396	1.00	21.88	W
15	ATOM	8497	OH2	WAT	W	323	48.769	50.559	-29.520	1.00	24.35	W
	ATOM	8498	OH2	WAT	W	325	66.709	71.607	-6.852	1.00	19.70	W
	ATOM	8499	OH2	WAT	W	326	28.790	93.746	-38.512	1.00	23.49	W
	ATOM	8500	OH2	WAT	W	327	32.509	64.768	-9.926	1.00	17.49	W
	ATOM	8501	OH2	WAT	W	328	13.454	50.922	-1.603	1.00	22.73	W
	ATOM	8502	OH2	WAT	W	329	39.346	49.244	30.155	1.00	19.73	W
	ATOM	8503	OH2	WAT	W	330	67.888	58.663	-24.054	1.00	19.93	W
20	ATOM	8504	OH2	WAT	W	331	20.779	58.985	-34.524	1.00	18.17	W
	ATOM	8505	OH2	WAT	W	332	37.550	75.641	-42.326	1.00	19.39	W
	ATOM	8506	OH2	WAT	W	333	31.895	51.294	-35.392	1.00	20.49	W
	ATOM	8507	OH2	WAT	W	334	12.860	71.207	-0.322	1.00	26.50	W
	ATOM	8508	OH2	WAT	W	335	37.017	41.136	-24.664	1.00	26.87	W
	ATOM	8509	OH2	WAT	W	336	19.245	42.748	-2.573	1.00	24.91	W
	ATOM	8510	OH2	WAT	W	337	50.102	44.093	7.091	1.00	17.71	W
30	ATOM	8511	OH2	WAT	W	338	37.447	45.431	-25.539	1.00	18.16	W
	ATOM	8512	OH2	WAT	W	339	75.300	74.056	-19.617	1.00	26.79	W
	ATOM	8513	OH2	WAT	W	340	50.344	61.083	-31.161	1.00	19.20	W
	ATOM	8514	OH2	WAT	W	341	42.877	56.717	-31.559	1.00	24.68	W
	ATOM	8515	OH2	WAT	W	342	13.262	68.814	0.935	1.00	21.56	W
	ATOM	8516	OH2	WAT	W	343	40.735	82.850	-31.321	1.00	26.31	W
	ATOM	8517	OH2	WAT	W	344	27.084	52.281	22.512	1.00	28.70	W
35	ATOM	8518	OH2	WAT	W	345	12.534	66.379	-9.439	1.00	20.41	W
	ATOM	8519	OH2	WAT	W	346	42.619	39.443	-15.769	1.00	22.12	W
	ATOM	8520	OH2	WAT	W	347	48.091	48.434	16.393	1.00	17.55	W
	ATOM	8521	OH2	WAT	W	348	11.547	46.877	17.887	1.00	24.28	W
	ATOM	8522	OH2	WAT	W	349	16.474	67.738	-19.969	1.00	19.28	W
	ATOM	8523	OH2	WAT	W	350	5.038	52.914	-5.886	1.00	27.53	W
	ATOM	8524	OH2	WAT	W	352	56.273	90.997	-25.706	1.00	22.05	W
40	ATOM	8525	OH2	WAT	W	353	39.139	83.260	-27.376	1.00	21.38	W
	ATOM	8526	OH2	WAT	W	354	60.719	56.850	15.845	1.00	26.22	W
	ATOM	8527	OH2	WAT	W	355	13.419	51.471	21.730	1.00	19.40	W
	ATOM	8528	OH2	WAT	W	356	43.394	93.839	-37.655	1.00	21.87	W
	ATOM	8529	OH2	WAT	W	357	28.161	35.317	-6.921	1.00	20.76	W
	ATOM	8530	OH2	WAT	W	358	80.258	64.057	-21.537	1.00	25.16	W
	ATOM	8531	OH2	WAT	W	359	51.563	45.062	9.678	1.00	28.77	W
50	ATOM	8532	OH2	WAT	W	360	21.446	46.840	-17.598	1.00	23.85	W
	ATOM	8533	OH2	WAT	W	361	47.431	71.776	-20.273	1.00	25.46	W
	ATOM	8534	OH2	WAT	W	362	21.320	85.819	-31.086	1.00	28.86	W
	ATOM	8535	OH2	WAT	W	363	32.967	66.868	21.309	1.00	21.01	W
	ATOM	8536	OH2	WAT	W	364	14.670	61.989	-14.512	1.00	20.46	W
	ATOM	8537	OH2	WAT	W	365	50.391	73.726	-25.274	1.00	22.28	W

5	ATOM	8538	OH2	WAT	W	366	41.946	79.336	-23.444	1.00	25.26	W
	ATOM	8539	OH2	WAT	W	367	40.090	45.369	25.381	1.00	22.87	W
	ATOM	8540	OH2	WAT	W	368	50.764	76.382	14.494	1.00	20.54	W
	ATOM	8541	OH2	WAT	W	369	38.488	45.146	-33.680	1.00	23.10	W
	ATOM	8542	OH2	WAT	W	370	61.315	54.313	-28.914	1.00	24.07	W
10	ATOM	8543	OH2	WAT	W	371	53.733	46.764	23.505	1.00	28.94	W
	ATOM	8544	OH2	WAT	W	372	56.967	43.140	-20.141	1.00	24.44	W
	ATOM	8545	OH2	WAT	W	373	67.533	54.709	-18.257	1.00	21.67	W
	ATOM	8546	OH2	WAT	W	374	42.392	79.852	-31.723	1.00	29.17	W
	ATOM	8547	OH2	WAT	W	375	29.171	62.237	-39.774	1.00	22.24	W
15	ATOM	8548	OH2	WAT	W	376	27.168	61.164	10.332	1.00	24.42	W
	ATOM	8549	OH2	WAT	W	377	45.832	45.100	23.009	1.00	26.77	W
	ATOM	8550	OH2	WAT	W	378	34.919	51.178	35.930	1.00	27.88	W
	ATOM	8551	OH2	WAT	W	379	57.740	62.410	7.853	1.00	25.59	W
	ATOM	8552	OH2	WAT	W	380	25.278	33.367	13.289	1.00	24.89	W
20	ATOM	8553	OH2	WAT	W	381	27.478	59.295	8.589	1.00	20.20	W
	ATOM	8554	OH2	WAT	W	382	42.720	94.359	-30.466	1.00	30.57	W
	ATOM	8555	OH2	WAT	W	383	13.949	58.005	-1.367	1.00	19.27	W
	ATOM	8556	OH2	WAT	W	384	49.207	76.417	5.694	1.00	28.48	W
	ATOM	8557	OH2	WAT	W	385	27.814	67.606	28.196	1.00	26.23	W
25	ATOM	8558	OH2	WAT	W	386	41.984	39.094	16.733	1.00	24.84	W
	ATOM	8559	OH2	WAT	W	387	58.873	46.425	-1.374	1.00	21.53	W
	ATOM	8560	OH2	WAT	W	388	73.274	76.732	-18.311	1.00	26.55	W
	ATOM	8561	OH2	WAT	W	389	19.687	39.332	17.591	1.00	18.94	W
	ATOM	8562	OH2	WAT	W	390	39.662	58.933	-18.087	1.00	19.74	W
30	ATOM	8563	OH2	WAT	W	391	28.147	47.005	-31.558	1.00	25.38	W
	ATOM	8564	OH2	WAT	W	392	68.586	46.914	-16.614	1.00	27.92	W
	ATOM	8565	OH2	WAT	W	393	66.468	62.581	-13.049	1.00	17.12	W
	ATOM	8566	OH2	WAT	W	394	26.521	75.061	2.145	1.00	22.89	W
	ATOM	8567	OH2	WAT	W	395	40.061	39.148	9.051	1.00	24.66	W
35	ATOM	8568	OH2	WAT	W	396	21.299	47.235	39.151	1.00	23.69	W
	ATOM	8569	OH2	WAT	W	397	42.155	74.782	-41.480	1.00	25.00	W
	ATOM	8570	OH2	WAT	W	398	14.628	55.293	27.232	1.00	32.51	W
	ATOM	8571	OH2	WAT	W	399	28.625	59.754	-38.993	1.00	26.37	W
	ATOM	8572	OH2	WAT	W	400	38.975	42.908	22.645	1.00	25.45	W
40	ATOM	8573	OH2	WAT	W	401	16.227	52.945	-22.427	1.00	28.89	W
	ATOM	8574	OH2	WAT	W	402	27.322	34.952	29.323	1.00	24.65	W
	ATOM	8575	OH2	WAT	W	403	17.137	80.720	-7.430	1.00	25.21	W
	ATOM	8576	OH2	WAT	W	404	48.222	41.802	3.682	1.00	24.08	W
	ATOM	8577	OH2	WAT	W	405	73.340	51.338	-11.365	1.00	28.24	W
45	ATOM	8578	OH2	WAT	W	406	58.671	53.682	-22.208	1.00	22.00	W
	ATOM	8579	OH2	WAT	W	407	47.526	79.533	-18.523	1.00	22.94	W
	ATOM	8580	OH2	WAT	W	408	40.691	96.492	-37.372	1.00	21.41	W
	ATOM	8581	OH2	WAT	W	409	60.926	63.677	15.141	1.00	27.39	W
	ATOM	8582	OH2	WAT	W	410	59.335	37.649	-15.222	1.00	26.73	W
50	ATOM	8583	OH2	WAT	W	411	20.923	30.305	17.732	1.00	29.75	W
	ATOM	8584	OH2	WAT	W	412	46.041	96.943	-43.820	1.00	21.70	W
	ATOM	8585	OH2	WAT	W	413	21.543	86.099	-19.119	1.00	29.10	W
	ATOM	8586	OH2	WAT	W	414	20.561	68.418	22.243	1.00	25.39	W
	ATOM	8587	OH2	WAT	W	415	45.142	69.283	-17.334	1.00	24.13	W
55	ATOM	8588	OH2	WAT	W	416	17.330	70.661	6.541	1.00	31.13	W
	ATOM	8589	OH2	WAT	W	417	51.111	52.780	-28.613	1.00	21.15	W
	ATOM	8590	OH2	WAT	W	418	19.096	83.349	-25.745	1.00	29.17	W
	ATOM	8591	OH2	WAT	W	419	39.889	86.020	-21.853	1.00	22.69	W
	ATOM	8592	OH2	WAT	W	420	22.570	66.011	29.297	1.00	28.90	W

5	ATOM	8593	OH2	WAT	W	421	24.823	59.430	-36.234	1.00	28.15	W
	ATOM	8594	OH2	WAT	W	422	58.331	34.694	-6.071	1.00	28.92	W
	ATOM	8595	OH2	WAT	W	423	50.546	79.034	-15.583	1.00	27.80	W
	ATOM	8596	OH2	WAT	W	424	17.745	68.564	24.329	1.00	32.50	W
	ATOM	8597	OH2	WAT	W	425	56.367	92.787	-29.437	1.00	24.61	W
10	ATOM	8598	OH2	WAT	W	426	52.556	73.131	4.237	1.00	33.92	W
	ATOM	8599	OH2	WAT	W	427	28.063	67.208	7.740	1.00	24.95	W
	ATOM	8600	OH2	WAT	W	428	22.030	36.775	0.168	1.00	21.71	W
	ATOM	8601	OH2	WAT	W	429	40.079	79.456	-28.245	1.00	25.42	W
	ATOM	8602	OH2	WAT	W	430	10.576	77.090	-5.015	1.00	30.97	W
15	ATOM	8603	OH2	WAT	W	431	27.152	65.194	9.060	1.00	25.26	W
	ATOM	8604	OH2	WAT	W	432	72.751	64.037	-20.984	1.00	26.96	W
	ATOM	8605	OH2	WAT	W	433	79.826	73.903	-17.648	1.00	28.48	W
	ATOM	8606	OH2	WAT	W	434	66.841	74.355	-4.271	1.00	30.30	W
	ATOM	8607	OH2	WAT	W	435	48.154	64.323	-28.370	1.00	22.20	W
20	ATOM	8608	OH2	WAT	W	436	42.519	39.358	-1.503	1.00	25.77	W
	ATOM	8609	OH2	WAT	W	437	63.183	67.822	-31.749	1.00	27.22	W
	ATOM	8610	OH2	WAT	W	438	24.165	41.927	-14.685	1.00	23.45	W
	ATOM	8611	OH2	WAT	W	439	27.758	50.897	13.213	1.00	19.47	W
	ATOM	8612	OH2	WAT	W	440	38.638	83.552	-39.787	1.00	22.96	W
25	ATOM	8613	OH2	WAT	W	441	76.697	74.036	-26.770	1.00	29.60	W
	ATOM	8614	OH2	WAT	W	442	28.767	72.466	22.467	1.00	25.85	W
	ATOM	8615	OH2	WAT	W	443	20.751	55.008	-35.607	1.00	31.09	W
	ATOM	8616	OH2	WAT	W	444	24.098	57.242	38.823	1.00	24.73	W
	ATOM	8617	OH2	WAT	W	445	38.190	49.342	-10.134	1.00	38.23	W
30	ATOM	8618	OH2	WAT	W	447	23.326	82.586	-40.633	1.00	24.86	W
	ATOM	8619	OH2	WAT	W	448	17.246	67.223	-26.245	1.00	27.75	W
	ATOM	8620	OH2	WAT	W	449	66.919	84.334	-22.218	1.00	23.81	W
	ATOM	8621	OH2	WAT	W	450	52.681	64.880	-27.991	1.00	41.60	W
	ATOM	8622	OH2	WAT	W	451	20.704	68.074	8.597	1.00	21.60	W
35	ATOM	8623	OH2	WAT	W	452	61.634	63.846	-30.745	1.00	28.03	W
	ATOM	8624	OH2	WAT	W	453	9.806	59.916	6.504	1.00	29.44	W
	ATOM	8625	OH2	WAT	W	454	31.630	85.850	-19.824	1.00	22.22	W
	ATOM	8626	OH2	WAT	W	455	28.063	88.041	-41.579	1.00	27.55	W
	ATOM	8627	OH2	WAT	W	456	44.698	82.605	-30.429	1.00	20.68	W
40	ATOM	8628	OH2	WAT	W	457	59.485	67.175	-34.677	1.00	26.13	W
	ATOM	8629	OH2	WAT	W	458	70.244	56.497	-12.495	1.00	28.68	W
	ATOM	8630	OH2	WAT	W	459	46.088	46.117	16.230	1.00	29.47	W
	ATOM	8631	OH2	WAT	W	460	46.004	82.700	-25.325	1.00	29.72	W
	ATOM	8632	OH2	WAT	W	461	56.907	87.672	-20.060	1.00	25.77	W
45	ATOM	8633	OH2	WAT	W	462	73.660	74.098	-5.829	1.00	23.60	W
	ATOM	8634	OH2	WAT	W	463	19.646	43.105	33.835	1.00	25.04	W
	ATOM	8635	OH2	WAT	W	464	79.264	51.116	-0.590	1.00	21.30	W
	ATOM	8636	OH2	WAT	W	465	66.047	45.418	-3.282	1.00	26.67	W
	ATOM	8637	OH2	WAT	W	467	48.396	78.020	-9.778	1.00	24.13	W
50	ATOM	8638	OH2	WAT	W	468	29.998	34.084	-1.514	1.00	22.90	W
	ATOM	8639	OH2	WAT	W	469	16.176	74.990	-24.051	1.00	31.88	W
	ATOM	8640	OH2	WAT	W	470	17.617	39.367	35.721	1.00	38.09	W
	ATOM	8641	OH2	WAT	W	471	22.534	31.157	29.484	1.00	28.54	W
	ATOM	8642	OH2	WAT	W	472	33.369	84.313	-18.330	1.00	15.97	W
55	ATOM	8643	OH2	WAT	W	473	41.250	94.879	-39.511	1.00	24.39	W
	ATOM	8644	OH2	WAT	W	474	44.232	83.630	-27.639	1.00	23.37	W
	ATOM	8645	OH2	WAT	W	475	30.862	57.188	4.543	1.00	17.90	W
	ATOM	8646	OH2	WAT	W	476	65.908	66.089	-0.376	1.00	24.05	W
	ATOM	8647	OH2	WAT	W	477	46.470	68.518	26.475	1.00	28.39	W

5	ATOM	8648	OH2	WAT	W	478	70.032	61.711	-20.342	1.00	28.95	W
	ATOM	8649	OH2	WAT	W	479	23.576	90.884	-26.085	1.00	32.69	W
	ATOM	8650	OH2	WAT	W	480	25.257	71.144	22.415	1.00	28.48	W
	ATOM	8651	OH2	WAT	W	481	14.011	69.331	26.764	1.00	25.72	W
	ATOM	8652	OH2	WAT	W	482	62.091	80.708	-18.944	1.00	22.51	W
10	ATOM	8653	OH2	WAT	W	483	27.568	47.649	45.829	1.00	30.99	W
	ATOM	8654	OH2	WAT	W	484	24.924	34.183	0.541	1.00	31.69	W
	ATOM	8655	OH2	WAT	W	485	57.542	69.040	13.372	1.00	35.06	W
	ATOM	8656	OH2	WAT	W	486	7.964	48.092	11.826	1.00	24.78	W
	ATOM	8657	OH2	WAT	W	487	71.310	59.790	1.011	1.00	30.00	W
15	ATOM	8658	OH2	WAT	W	488	67.619	88.039	-23.404	1.00	24.62	W
	ATOM	8659	OH2	WAT	W	489	12.380	75.159	-13.498	1.00	29.76	W
	ATOM	8660	OH2	WAT	W	490	27.878	52.141	42.550	1.00	28.52	W
	ATOM	8661	OH2	WAT	W	491	22.024	62.686	33.804	1.00	29.60	W
	ATOM	8662	OH2	WAT	W	492	59.396	66.922	-26.287	1.00	39.41	W
20	ATOM	8663	OH2	WAT	W	493	34.320	87.124	-10.560	1.00	30.89	W
	ATOM	8664	OH2	WAT	W	494	30.216	36.445	29.080	1.00	25.09	W
	ATOM	8665	OH2	WAT	W	495	8.571	49.568	5.657	1.00	35.32	W
	ATOM	8666	OH2	WAT	W	498	41.955	67.344	29.326	1.00	25.76	W
	ATOM	8667	OH2	WAT	W	499	72.402	75.774	-27.267	1.00	28.93	W
25	ATOM	8668	OH2	WAT	W	500	8.848	44.348	12.960	1.00	29.54	W
	ATOM	8669	OH2	WAT	W	501	71.065	43.044	-15.336	1.00	30.91	W
	ATOM	8670	OH2	WAT	W	502	41.462	44.667	-24.401	1.00	26.41	W
	ATOM	8671	OH2	WAT	W	503	39.798	66.983	31.423	1.00	27.70	W
	ATOM	8672	OH2	WAT	W	504	53.321	52.719	26.356	1.00	25.71	W
30	ATOM	8673	OH2	WAT	W	505	26.304	44.377	-27.111	1.00	28.70	W
	ATOM	8674	OH2	WAT	W	506	19.649	52.518	-27.061	1.00	26.07	W
	ATOM	8675	OH2	WAT	W	507	70.823	95.128	-34.949	1.00	33.07	W
	ATOM	8676	OH2	WAT	W	508	48.072	64.729	-25.801	1.00	25.60	W
	ATOM	8677	OH2	WAT	W	509	44.452	64.662	-35.219	1.00	35.32	W
35	ATOM	8678	OH2	WAT	W	510	18.126	52.856	35.976	1.00	29.35	W
	ATOM	8679	OH2	WAT	W	511	83.591	70.051	-20.249	1.00	24.79	W
	ATOM	8680	OH2	WAT	W	512	43.836	79.945	-42.480	1.00	26.76	W
	ATOM	8681	OH2	WAT	W	513	22.688	62.534	16.084	1.00	24.30	W
	ATOM	8682	OH2	WAT	W	514	45.760	79.249	-7.906	1.00	24.96	W
40	ATOM	8683	OH2	WAT	W	515	26.801	88.079	-4.103	1.00	32.00	W
	ATOM	8684	OH2	WAT	W	516	38.743	42.182	-22.199	1.00	30.07	W
	ATOM	8685	OH2	WAT	W	517	36.884	29.145	13.084	1.00	31.77	W
	ATOM	8686	OH2	WAT	W	518	20.410	65.507	27.349	1.00	30.30	W
	ATOM	8687	OH2	WAT	W	519	6.729	59.284	2.971	1.00	32.47	W
45	ATOM	8688	OH2	WAT	W	520	61.217	77.418	-12.932	1.00	22.54	W
	ATOM	8689	OH2	WAT	W	521	28.095	49.290	38.335	1.00	25.33	W
	ATOM	8690	OH2	WAT	W	522	29.442	41.131	-25.576	1.00	24.39	W
	ATOM	8691	OH2	WAT	W	523	19.537	67.313	-2.706	1.00	23.69	W
	ATOM	8692	OH2	WAT	W	524	43.446	41.720	-7.635	1.00	26.49	W
50	ATOM	8693	OH2	WAT	W	525	48.643	55.026	-22.750	1.00	19.36	W
	ATOM	8694	OH2	WAT	W	526	26.385	81.719	-3.635	1.00	41.05	W
	ATOM	8695	OH2	WAT	W	527	35.767	39.049	-16.111	1.00	28.81	W
	ATOM	8696	OH2	WAT	W	528	58.571	51.181	22.159	1.00	21.40	W
	ATOM	8697	OH2	WAT	W	529	54.235	45.937	4.993	1.00	33.49	W
55	ATOM	8698	OH2	WAT	W	530	46.524	80.242	-42.585	1.00	25.30	W
	ATOM	8699	OH2	WAT	W	531	71.643	84.509	-20.062	1.00	25.12	W
	ATOM	8700	OH2	WAT	W	532	61.128	67.499	-36.724	1.00	28.07	W
	ATOM	8701	OH2	WAT	W	533	37.969	31.489	16.453	1.00	39.22	W
	ATOM	8702	OH2	WAT	W	534	58.573	34.864	-12.260	1.00	28.74	W

5	ATOM	8703	OH2	WAT	W	535	21.002	79.421	-23.639	1.00	27.60	W
	ATOM	8704	OH2	WAT	W	536	51.295	71.304	-20.170	1.00	17.32	W
	ATOM	8705	OH2	WAT	W	537	32.081	85.225	-8.550	1.00	25.94	W
	ATOM	8706	OH2	WAT	W	538	21.710	29.081	28.041	1.00	31.53	W
	ATOM	8707	OH2	WAT	W	539	22.095	87.545	-7.194	1.00	35.62	W
10	ATOM	8708	OH2	WAT	W	540	31.578	57.434	37.279	1.00	27.30	W
	ATOM	8709	OH2	WAT	W	541	17.488	81.399	-17.281	1.00	34.73	W
	ATOM	8710	OH2	WAT	W	542	51.884	58.999	6.332	1.00	41.97	W
	ATOM	8711	OH2	WAT	W	544	21.957	80.184	-35.949	1.00	24.09	W
	ATOM	8712	OH2	WAT	W	545	24.829	74.038	9.017	1.00	26.59	W
15	ATOM	8713	OH2	WAT	W	546	21.438	79.893	5.316	1.00	27.77	W
	ATOM	8714	OH2	WAT	W	547	48.301	94.016	-37.157	1.00	32.94	W
	ATOM	8715	OH2	WAT	W	548	39.887	38.849	-3.487	1.00	22.74	W
	ATOM	8716	OH2	WAT	W	549	39.630	96.139	-28.202	1.00	36.55	W
	ATOM	8717	OH2	WAT	W	550	36.804	34.917	-15.757	1.00	29.05	W
20	ATOM	8718	OH2	WAT	W	551	34.920	45.669	33.370	1.00	19.31	W
	ATOM	8719	OH2	WAT	W	552	55.621	77.953	-1.577	1.00	32.69	W
	ATOM	8720	OH2	WAT	W	553	70.242	61.953	-0.089	1.00	28.70	W
	ATOM	8721	OH2	WAT	W	554	46.112	74.216	22.600	1.00	30.69	W
	ATOM	8722	OH2	WAT	W	555	48.424	46.019	-23.172	1.00	27.05	W
25	ATOM	8723	OH2	WAT	W	556	60.520	91.845	-28.475	1.00	29.32	W
	ATOM	8724	OH2	WAT	W	557	37.929	62.300	35.419	1.00	28.02	W
	ATOM	8725	OH2	WAT	W	559	29.431	63.026	-37.425	1.00	39.57	W
	ATOM	8726	OH2	WAT	W	560	61.433	48.378	-31.702	1.00	37.37	W
	ATOM	8727	OH2	WAT	W	561	62.085	83.114	-38.287	1.00	25.83	W
30	ATOM	8728	OH2	WAT	W	562	62.988	42.869	-20.951	1.00	25.61	W
	ATOM	8729	OH2	WAT	W	563	53.472	44.227	22.714	1.00	28.63	W
	ATOM	8730	OH2	WAT	W	564	30.645	34.628	-9.707	1.00	30.01	W
	ATOM	8731	OH2	WAT	W	565	29.635	31.443	21.942	1.00	30.77	W
	ATOM	8732	OH2	WAT	W	566	78.625	69.011	-12.005	1.00	25.23	W
35	ATOM	8733	OH2	WAT	W	567	31.369	69.210	-45.418	1.00	31.91	W
	ATOM	8734	OH2	WAT	W	568	73.477	82.280	-21.188	1.00	26.33	W
	ATOM	8735	OH2	WAT	W	569	47.244	71.014	-23.950	1.00	29.92	W
	ATOM	8736	OH2	WAT	W	570	20.446	37.879	12.137	1.00	27.15	W
	ATOM	8737	OH2	WAT	W	571	34.990	94.883	-32.269	1.00	28.71	W
40	ATOM	8738	OH2	WAT	W	572	17.230	41.552	9.181	1.00	29.09	W
	ATOM	8739	OH2	WAT	W	573	20.459	80.167	-33.664	1.00	36.30	W
	ATOM	8740	OH2	WAT	W	574	49.151	91.694	-24.092	1.00	27.95	W
	ATOM	8741	OH2	WAT	W	575	43.768	44.908	19.223	1.00	30.88	W
	ATOM	8742	OH2	WAT	W	576	21.182	35.533	-5.151	1.00	30.52	W
45	ATOM	8743	OH2	WAT	W	577	65.093	87.994	-24.138	1.00	28.32	W
	ATOM	8744	OH2	WAT	W	578	46.841	53.785	-21.480	1.00	24.30	W
	ATOM	8745	OH2	WAT	W	579	71.566	63.009	-27.060	1.00	31.49	W
	ATOM	8746	OH2	WAT	W	580	19.970	35.544	25.719	1.00	26.74	W
	ATOM	8747	OH2	WAT	W	581	59.366	86.847	-45.758	1.00	30.58	W
50	ATOM	8748	OH2	WAT	W	582	51.734	34.233	-7.865	1.00	37.38	W
	ATOM	8749	OH2	WAT	W	583	56.216	78.991	-14.684	1.00	33.27	W
	ATOM	8750	OH2	WAT	W	584	28.884	69.807	-39.556	1.00	21.83	W
	ATOM	8751	OH2	WAT	W	585	45.187	83.486	-43.201	1.00	32.24	W
	ATOM	8752	OH2	WAT	W	586	29.669	81.398	-42.870	1.00	30.89	W
55	ATOM	8753	OH2	WAT	W	587	28.252	90.617	-42.596	1.00	28.76	W
	ATOM	8754	OH2	WAT	W	588	19.626	84.323	-28.580	1.00	37.20	W
	ATOM	8755	OH2	WAT	W	589	37.741	97.138	-30.667	1.00	33.56	W
	ATOM	8756	OH2	WAT	W	590	40.566	44.263	-31.708	1.00	35.51	W
	ATOM	8757	OH2	WAT	W	591	21.114	41.599	35.229	1.00	29.14	W

5	ATOM	8758	OH2	WAT	W	592	39.247	30.347	13.105	1.00	38.89	W
	ATOM	8759	OH2	WAT	W	593	62.099	85.771	-22.844	1.00	28.21	W
	ATOM	8760	OH2	WAT	W	594	31.040	68.457	14.098	1.00	24.91	W
	ATOM	8761	OH2	WAT	W	595	27.896	67.871	33.967	1.00	35.64	W
	ATOM	8762	OH2	WAT	W	596	15.003	63.544	-25.860	1.00	25.42	W
	ATOM	8763	OH2	WAT	W	597	29.601	72.448	12.548	1.00	21.34	W
10	ATOM	8764	OH2	WAT	W	599	61.559	92.883	-38.650	1.00	36.64	W
	ATOM	8765	OH2	WAT	W	601	59.128	62.348	25.815	1.00	26.23	W
	ATOM	8766	OH2	WAT	W	602	51.205	79.279	-1.713	1.00	23.39	W
	ATOM	8767	OH2	WAT	W	604	21.242	60.395	26.828	1.00	38.73	W
	ATOM	8768	OH2	WAT	W	605	59.833	90.941	-35.483	1.00	27.48	W
	ATOM	8769	OH2	WAT	W	606	24.014	60.658	36.037	1.00	26.81	W
15	ATOM	8770	OH2	WAT	W	607	11.603	61.649	0.313	1.00	32.24	W
	ATOM	8771	OH2	WAT	W	608	55.226	80.552	-19.378	1.00	23.64	W
	ATOM	8772	OH2	WAT	W	609	16.743	74.434	-28.596	1.00	34.41	W
	ATOM	8773	OH2	WAT	W	610	40.872	40.649	-21.500	1.00	28.24	W
	ATOM	8774	OH2	WAT	W	611	28.668	68.441	-46.081	1.00	39.60	W
	ATOM	8775	OH2	WAT	W	612	40.006	35.395	11.369	1.00	24.43	W
20	ATOM	8776	OH2	WAT	W	613	18.904	80.509	-11.812	1.00	29.72	W
	ATOM	8777	OH2	WAT	W	614	64.971	79.735	-8.907	1.00	31.04	W
	ATOM	8778	OH2	WAT	W	615	72.774	43.611	-12.245	1.00	33.51	W
	ATOM	8779	OH2	WAT	W	616	13.009	74.622	-19.201	1.00	32.27	W
	ATOM	8780	OH2	WAT	W	617	57.062	75.479	-2.931	1.00	23.61	W
	ATOM	8781	OH2	WAT	W	618	20.829	58.092	37.896	1.00	33.95	W
25	ATOM	8782	OH2	WAT	W	619	50.615	77.218	2.234	1.00	30.34	W
	ATOM	8783	OH2	WAT	W	620	28.468	45.385	41.074	1.00	36.42	W
	ATOM	8784	OH2	WAT	W	621	23.139	36.879	13.360	1.00	24.96	W
	ATOM	8785	OH2	WAT	W	622	33.385	39.569	-19.404	1.00	35.03	W
	ATOM	8786	OH2	WAT	W	623	33.787	49.363	-15.050	1.00	32.82	W
	ATOM	8787	OH2	WAT	W	624	29.449	88.728	-26.140	1.00	13.06	W
30	ATOM	8788	OH2	WAT	W	625	37.151	33.801	5.746	1.00	33.81	W
	ATOM	8789	OH2	WAT	W	626	71.759	62.627	-18.009	1.00	27.73	W
	ATOM	8790	OH2	WAT	W	627	34.323	70.260	-44.782	1.00	32.70	W
	ATOM	8791	OH2	WAT	W	628	64.347	77.058	0.515	1.00	32.46	W
	ATOM	8792	OH2	WAT	W	630	35.947	55.944	8.521	1.00	41.57	W
	ATOM	8793	OH2	WAT	W	631	30.659	51.202	39.665	1.00	36.36	W
35	ATOM	8794	OH2	WAT	W	632	54.265	57.827	-13.764	1.00	37.73	W
	ATOM	8795	OH2	WAT	W	634	21.136	54.633	47.094	1.00	34.03	W
	ATOM	8796	OH2	WAT	W	635	14.453	50.762	1.021	1.00	26.77	W
	ATOM	8797	OH2	WAT	W	636	25.475	91.463	-33.051	1.00	31.56	W
	ATOM	8798	OH2	WAT	W	637	73.185	71.227	-29.293	1.00	31.95	W
	ATOM	8799	OH2	WAT	W	638	55.875	38.711	1.247	1.00	35.90	W
40	ATOM	8800	OH2	WAT	W	639	37.492	83.840	4.429	1.00	33.70	W
	ATOM	8801	OH2	WAT	W	640	45.485	55.126	10.105	1.00	31.21	W
	ATOM	8802	OH2	WAT	W	642	66.889	81.336	-11.141	1.00	29.67	W
	ATOM	8803	OH2	WAT	W	643	40.401	89.429	-19.494	1.00	34.59	W
	ATOM	8804	OH2	WAT	W	644	43.726	56.577	33.715	1.00	23.89	W
	ATOM	8805	OH2	WAT	W	645	56.389	50.260	-30.348	1.00	38.11	W
45	ATOM	8806	OH2	WAT	W	646	63.345	57.663	25.731	1.00	33.20	W
	ATOM	8807	OH2	WAT	W	647	62.132	48.402	-21.140	1.00	30.17	W
	ATOM	8808	OH2	WAT	W	648	62.795	59.511	-22.094	1.00	43.84	W
	ATOM	8809	OH2	WAT	W	649	39.839	77.768	13.657	1.00	38.17	W
	ATOM	8810	OH2	WAT	W	650	26.708	91.704	-27.698	1.00	27.71	W
	ATOM	8811	OH2	WAT	W	651	13.502	70.141	-9.466	1.00	24.86	W
55	ATOM	8812	OH2	WAT	W	652	60.670	78.924	-41.587	1.00	24.16	W

5	ATOM	8813	OH2	WAT	W	653	39.252	43.518	26.888	1.00	28.02	W
	ATOM	8814	OH2	WAT	W	654	11.931	70.822	2.485	1.00	31.13	W
	ATOM	8815	OH2	WAT	W	655	36.424	62.574	-38.251	1.00	29.44	W
	ATOM	8816	OH2	WAT	W	656	76.055	83.157	-25.276	1.00	39.00	W
	ATOM	8817	OH2	WAT	W	657	37.608	80.454	-0.581	1.00	23.73	W
10	ATOM	8818	OH2	WAT	W	658	47.350	53.378	35.765	1.00	33.39	W
	ATOM	8819	OH2	WAT	W	659	48.604	97.804	-33.661	1.00	29.32	W
	ATOM	8820	OH2	WAT	W	660	63.595	75.084	-45.655	1.00	33.19	W
	ATOM	8821	OH2	WAT	W	661	60.081	71.509	0.342	1.00	33.30	W
	ATOM	8822	OH2	WAT	W	662	41.130	48.174	-29.424	1.00	33.56	W
15	ATOM	8823	OH2	WAT	W	663	55.384	40.246	-12.570	1.00	43.02	W
	ATOM	8824	OH2	WAT	W	664	74.977	83.935	-22.956	1.00	33.05	W
	ATOM	8825	OH2	WAT	W	665	63.406	52.047	-0.358	1.00	26.92	W
	ATOM	8826	OH2	WAT	W	666	37.221	36.481	18.964	1.00	39.54	W
	ATOM	8827	OH2	WAT	W	667	57.641	36.009	-2.585	1.00	36.41	W
20	ATOM	8828	OH2	WAT	W	668	23.115	48.814	-36.297	1.00	32.39	W
	ATOM	8829	OH2	WAT	W	669	17.636	71.546	-29.530	1.00	35.34	W
	ATOM	8830	OH2	WAT	W	670	30.674	40.378	38.143	1.00	36.19	W
	ATOM	8831	OH2	WAT	W	671	27.433	50.036	23.323	1.00	31.31	W
	ATOM	8832	OH2	WAT	W	672	30.557	48.124	40.431	1.00	36.97	W
25	ATOM	8833	OH2	WAT	W	673	59.855	52.908	-30.690	1.00	30.00	W
	ATOM	8834	OH2	WAT	W	674	44.853	40.592	13.345	1.00	29.68	W
	ATOM	8835	OH2	WAT	W	675	34.115	47.984	36.057	1.00	30.03	W
	ATOM	8836	OH2	WAT	W	676	27.358	82.247	3.089	1.00	28.86	W
	ATOM	8837	OH2	WAT	W	677	58.497	92.398	-42.235	1.00	35.60	W
30	ATOM	8838	OH2	WAT	W	678	49.253	52.427	-37.624	1.00	38.08	W
	ATOM	8839	OH2	WAT	W	679	53.379	70.899	-16.924	1.00	25.65	W
	ATOM	8840	OH2	WAT	W	680	57.626	62.695	-15.503	1.00	35.96	W
	ATOM	8841	OH2	WAT	W	681	28.297	44.350	-29.713	1.00	28.58	W
	ATOM	8842	OH2	WAT	W	682	48.852	49.432	-38.154	1.00	36.59	W
35	ATOM	8843	OH2	WAT	W	683	35.576	77.511	-43.062	1.00	29.02	W
	ATOM	8844	OH2	WAT	W	684	9.623	58.535	17.852	1.00	33.51	W
	ATOM	8845	OH2	WAT	W	686	61.093	45.523	-3.654	1.00	29.72	W
	ATOM	8846	OH2	WAT	W	687	65.483	78.684	-5.700	1.00	27.73	W
	ATOM	8847	OH2	WAT	W	688	7.036	58.084	14.815	1.00	36.18	W
40	ATOM	8848	OH2	WAT	W	689	49.432	50.626	32.574	1.00	27.09	W
	ATOM	8849	OH2	WAT	W	690	18.651	62.429	22.834	1.00	42.61	W
	ATOM	8850	OH2	WAT	W	691	30.258	34.015	21.108	1.00	34.14	W
	ATOM	8851	OH2	WAT	W	692	17.405	45.631	-14.008	1.00	26.24	W
	ATOM	8852	OH2	WAT	W	693	28.725	55.316	39.985	1.00	27.55	W
45	ATOM	8853	OH2	WAT	W	700	50.875	59.946	-8.928	1.00	11.46	W
	ATOM	8854	OH2	WAT	W	701	43.729	63.036	-28.635	1.00	10.90	W
	ATOM	8855	OH2	WAT	W	702	38.088	81.789	-31.356	1.00	11.61	W
	ATOM	8856	OH2	WAT	W	703	32.349	39.151	-4.925	1.00	10.69	W
	ATOM	8857	OH2	WAT	W	705	60.345	60.974	-18.133	1.00	10.00	W
50	ATOM	8858	OH2	WAT	W	706	63.195	58.590	-1.434	1.00	14.50	W
	ATOM	8859	OH2	WAT	W	707	60.694	60.822	-3.596	1.00	12.04	W
	ATOM	8860	OH2	WAT	W	708	46.601	74.399	7.782	1.00	12.30	W
	ATOM	8861	OH2	WAT	W	709	54.966	57.537	-0.483	1.00	13.73	W
	ATOM	8862	OH2	WAT	W	710	30.225	74.877	-29.275	1.00	13.65	W
55	ATOM	8863	OH2	WAT	W	712	58.878	56.724	-1.422	1.00	11.48	W
	ATOM	8864	OH2	WAT	W	713	58.700	52.597	-0.079	1.00	14.33	W
	ATOM	8865	OH2	WAT	W	714	63.107	61.088	-4.839	1.00	12.89	W
	ATOM	8866	OH2	WAT	W	716	27.955	48.693	12.047	1.00	17.48	W
	ATOM	8867	OH2	WAT	W	717	66.623	56.169	-20.267	1.00	17.13	W

5	ATOM	8868	OH2	WAT	W	718	19.936	46.755	-14.350	1.00	16.77	W
	ATOM	8869	OH2	WAT	W	719	38.627	69.291	-38.085	1.00	17.45	W
	ATOM	8870	OH2	WAT	W	720	33.604	60.216	23.237	1.00	13.28	W
	ATOM	8871	OH2	WAT	W	721	39.652	55.611	3.022	1.00	13.93	W
	ATOM	8872	OH2	WAT	W	722	24.646	61.455	9.397	1.00	14.96	W
10	ATOM	8873	OH2	WAT	W	723	16.774	57.081	13.004	1.00	14.37	W
	ATOM	8874	OH2	WAT	W	724	39.450	69.183	-35.373	1.00	14.13	W
	ATOM	8875	OH2	WAT	W	725	49.892	67.527	4.244	1.00	18.93	W
	ATOM	8876	OH2	WAT	W	726	27.672	53.307	20.113	1.00	14.50	W
	ATOM	8877	OH2	WAT	W	728	29.774	83.030	2.442	1.00	22.49	W
15	ATOM	8878	OH2	WAT	W	729	28.084	90.857	-25.245	1.00	18.36	W
	ATOM	8879	OH2	WAT	W	730	46.074	77.662	9.467	1.00	18.68	W
	ATOM	8880	OH2	WAT	W	732	12.563	49.413	17.711	1.00	22.37	W
	ATOM	8881	OH2	WAT	W	733	81.206	68.406	-11.410	1.00	22.16	W
	ATOM	8882	OH2	WAT	W	734	41.474	44.788	-6.895	1.00	14.61	W
20	ATOM	8883	OH2	WAT	W	735	45.595	67.851	-27.467	1.00	21.17	W
	ATOM	8884	OH2	WAT	W	736	14.207	50.502	24.242	1.00	21.49	W
	ATOM	8885	OH2	WAT	W	737	67.655	46.510	-1.449	1.00	22.53	W
	ATOM	8886	OH2	WAT	W	738	9.070	50.439	8.116	1.00	23.35	W
	ATOM	8887	OH2	WAT	W	739	48.508	40.902	-1.043	1.00	22.37	W
25	ATOM	8888	OH2	WAT	W	740	17.771	74.445	3.962	1.00	24.93	W
	ATOM	8889	OH2	WAT	W	741	44.945	55.093	-18.224	1.00	23.58	W
	ATOM	8890	OH2	WAT	W	742	83.440	66.338	-15.493	1.00	19.93	W
	ATOM	8891	OH2	WAT	W	743	48.974	69.111	-36.939	1.00	23.36	W
	ATOM	8892	OH2	WAT	W	744	51.693	70.185	-38.125	1.00	23.72	W
30	ATOM	8893	OH2	WAT	W	745	29.695	72.422	34.299	1.00	24.92	W
	ATOM	8894	OH2	WAT	W	746	37.507	61.422	-32.436	1.00	21.97	W
	ATOM	8895	OH2	WAT	W	747	57.372	48.994	21.252	1.00	21.06	W
	ATOM	8896	OH2	WAT	W	748	42.963	59.488	-31.444	1.00	21.62	W
	ATOM	8897	OH2	WAT	W	749	32.019	34.321	-3.215	1.00	21.00	W
35	ATOM	8898	OH2	WAT	W	750	37.070	59.043	-33.539	1.00	21.08	W
	ATOM	8899	OH2	WAT	W	751	61.487	59.205	14.822	1.00	24.82	W
	ATOM	8900	OH2	WAT	W	752	40.156	56.207	-19.111	1.00	25.71	W
	ATOM	8901	OH2	WAT	W	753	47.525	87.559	-44.311	1.00	48.44	W
	ATOM	8902	OH2	WAT	W	754	61.661	76.348	-10.460	1.00	21.23	W
40	ATOM	8903	OH2	WAT	W	755	79.392	50.972	-11.546	1.00	39.61	W
	ATOM	8904	OH2	WAT	W	756	37.676	51.645	-18.478	1.00	18.77	W
	ATOM	8905	OH2	WAT	W	757	25.691	52.103	13.079	1.00	23.59	W
	ATOM	8906	OH2	WAT	W	758	69.687	63.958	-28.517	1.00	25.13	W
	ATOM	8907	OH2	WAT	W	759	73.007	66.604	-9.978	1.00	21.68	W
45	ATOM	8908	OH2	WAT	W	760	42.818	56.438	2.724	1.00	17.92	W
	ATOM	8909	OH2	WAT	W	761	56.051	65.114	-36.107	1.00	19.42	W
	ATOM	8910	OH2	WAT	W	762	17.857	66.012	27.868	1.00	26.73	W
	ATOM	8911	OH2	WAT	W	763	11.781	63.583	-16.941	1.00	21.03	W
	ATOM	8912	OH2	WAT	W	764	35.221	86.295	-17.790	1.00	27.96	W
50	ATOM	8913	OH2	WAT	W	766	9.801	60.334	-20.514	1.00	24.44	W
	ATOM	8914	OH2	WAT	W	767	11.577	48.702	-2.429	1.00	28.25	W
	ATOM	8915	OH2	WAT	W	768	40.633	56.964	31.024	1.00	28.09	W
	ATOM	8916	OH2	WAT	W	769	39.812	52.932	36.459	1.00	28.11	W
	ATOM	8917	OH2	WAT	W	770	49.931	47.339	28.976	1.00	22.00	W
55	ATOM	8918	OH2	WAT	W	771	24.098	34.395	15.460	1.00	23.97	W
	ATOM	8919	OH2	WAT	W	772	59.487	50.889	24.775	1.00	26.83	W
	ATOM	8920	OH2	WAT	W	773	38.030	83.105	-1.002	1.00	29.02	W
	ATOM	8921	OH2	WAT	W	775	12.961	51.685	-12.118	1.00	24.44	W
	ATOM	8922	OH2	WAT	W	776	48.180	50.593	35.188	1.00	27.91	W

5	ATOM	8923	OH2	WAT	W	777	48.088	41.570	-5.478	1.00	25.82	W
	ATOM	8924	OH2	WAT	W	778	22.201	40.755	-11.309	1.00	22.86	W
	ATOM	8925	OH2	WAT	W	779	16.035	36.324	16.220	1.00	33.87	W
	ATOM	8926	OH2	WAT	W	780	22.449	68.096	20.372	1.00	25.52	W
	ATOM	8927	OH2	WAT	W	781	72.144	47.265	-17.924	1.00	27.21	W
10	ATOM	8928	OH2	WAT	W	782	40.774	85.239	-11.931	1.00	23.09	W
	ATOM	8929	OH2	WAT	W	783	56.758	46.693	15.829	1.00	26.36	W
	ATOM	8930	OH2	WAT	W	784	51.826	63.844	24.459	1.00	25.35	W
	ATOM	8931	OH2	WAT	W	785	56.613	58.444	1.389	1.00	27.95	W
	ATOM	8932	OH2	WAT	W	786	57.457	58.417	5.430	1.00	28.29	W
15	ATOM	8933	OH2	WAT	W	787	75.229	64.103	-16.398	1.00	25.10	W
	ATOM	8934	OH2	WAT	W	788	14.676	70.516	-23.121	1.00	24.85	W
	ATOM	8935	OH2	WAT	W	789	13.074	52.164	-15.015	1.00	26.93	W
	ATOM	8936	OH2	WAT	W	790	13.077	61.896	-25.010	1.00	28.53	W
	ATOM	8937	OH2	WAT	W	791	23.191	87.067	-32.614	1.00	29.37	W
20	ATOM	8938	OH2	WAT	W	792	66.312	81.679	-14.185	1.00	25.05	W
	ATOM	8939	OH2	WAT	W	793	47.318	61.469	-28.719	1.00	27.79	W
	ATOM	8940	OH2	WAT	W	794	52.473	70.852	5.989	1.00	28.42	W
	ATOM	8941	OH2	WAT	W	795	40.973	55.861	-33.310	1.00	27.84	W
	ATOM	8942	OH2	WAT	W	796	30.245	66.418	10.988	1.00	25.30	W
25	ATOM	8943	OH2	WAT	W	797	39.668	39.709	19.992	1.00	28.66	W
	ATOM	8944	OH2	WAT	W	798	44.704	55.276	36.258	1.00	32.18	W
	ATOM	8945	OH2	WAT	W	799	13.966	62.480	14.594	1.00	26.13	W
	ATOM	8946	OH2	WAT	W	800	40.024	39.702	-0.423	1.00	27.38	W
	ATOM	8947	OH2	WAT	W	801	32.549	69.495	22.160	1.00	28.57	W
30	ATOM	8948	OH2	WAT	W	802	41.883	44.124	-11.770	1.00	25.88	W
	ATOM	8949	OH2	WAT	W	803	26.947	41.616	-27.654	1.00	30.54	W
	ATOM	8950	OH2	WAT	W	804	19.843	41.627	-5.057	1.00	25.74	W
	ATOM	8951	OH2	WAT	W	805	13.685	60.590	7.622	1.00	25.20	W
	ATOM	8952	OH2	WAT	W	806	46.720	45.811	11.549	1.00	29.52	W
35	ATOM	8953	OH2	WAT	W	807	42.921	68.593	-29.946	1.00	27.18	W
	ATOM	8954	OH2	WAT	W	808	24.412	53.888	-8.318	1.00	33.09	W
	ATOM	8955	OH2	WAT	W	809	47.609	69.894	-16.650	1.00	25.75	W
	ATOM	8956	OH2	WAT	W	810	58.802	93.579	-27.521	1.00	28.20	W
	ATOM	8957	OH2	WAT	W	811	31.338	79.105	-42.859	1.00	29.67	W
40	ATOM	8958	OH2	WAT	W	812	22.092	42.668	-13.217	1.00	24.02	W
	ATOM	8959	OH2	WAT	W	813	52.770	92.046	-23.358	1.00	26.46	W
	ATOM	8960	OH2	WAT	W	814	60.321	50.996	20.144	1.00	31.94	W
	ATOM	8961	OH2	WAT	W	815	60.777	56.054	2.005	1.00	27.67	W
	ATOM	8962	OH2	WAT	W	816	19.477	58.541	-36.746	1.00	23.57	W
45	ATOM	8963	OH2	WAT	W	817	30.153	49.938	12.462	1.00	54.57	W
	ATOM	8964	OH2	WAT	W	818	26.284	66.727	19.939	1.00	26.81	W
	ATOM	8965	OH2	WAT	W	819	11.971	41.446	19.843	1.00	29.18	W
	ATOM	8966	OH2	WAT	W	820	69.267	77.131	-34.141	1.00	25.35	W
	ATOM	8967	OH2	WAT	W	821	16.589	42.916	-2.539	1.00	26.70	W
50	ATOM	8968	OH2	WAT	W	822	35.924	59.889	-37.655	1.00	33.22	W
	ATOM	8969	OH2	WAT	W	823	34.054	66.190	-42.550	1.00	34.74	W
	ATOM	8970	OH2	WAT	W	824	57.237	36.102	-14.386	1.00	32.76	W
	ATOM	8971	OH2	WAT	W	825	37.157	37.518	2.919	1.00	29.99	W
	ATOM	8972	OH2	WAT	W	826	51.214	66.642	8.544	1.00	21.97	W
55	ATOM	8973	OH2	WAT	W	829	10.791	51.469	21.342	1.00	26.06	W
	ATOM	8974	OH2	WAT	W	830	30.338	87.215	-14.953	1.00	24.37	W
	ATOM	8975	OH2	WAT	W	831	42.244	54.832	-17.439	1.00	27.73	W
	ATOM	8976	OH2	WAT	W	832	48.355	76.393	8.326	1.00	29.41	W
	ATOM	8977	OH2	WAT	W	833	29.663	76.034	10.889	1.00	28.76	W

5	ATOM	8978	OH2	WAT	W	834	43.010	98.114	-37.134	1.00	31.67	W
	ATOM	8979	OH2	WAT	W	835	24.455	65.295	9.661	1.00	27.20	W
	ATOM	8980	OH2	WAT	W	836	64.682	78.684	-1.585	1.00	26.20	W
	ATOM	8981	OH2	WAT	W	837	43.254	40.464	-22.987	1.00	27.81	W
	ATOM	8982	OH2	WAT	W	838	59.455	49.064	2.200	1.00	31.34	W
10	ATOM	8983	OH2	WAT	W	839	68.991	41.685	-17.211	1.00	28.54	W
	ATOM	8984	OH2	WAT	W	840	24.783	71.648	-39.983	1.00	23.32	W
	ATOM	8985	OH2	WAT	W	841	23.732	48.420	-24.123	1.00	30.99	W
	ATOM	8986	OH2	WAT	W	842	46.974	68.268	-24.515	1.00	24.37	W
	ATOM	8987	OH2	WAT	W	843	53.359	53.304	-30.034	1.00	30.89	W
15	ATOM	8988	OH2	WAT	W	844	24.825	34.332	35.789	1.00	31.04	W
	ATOM	8989	OH2	WAT	W	845	13.297	52.427	25.888	1.00	29.86	W
	ATOM	8990	OH2	WAT	W	846	51.677	44.456	2.991	1.00	29.74	W
	ATOM	8991	OH2	WAT	W	847	21.471	55.374	39.891	1.00	35.10	W
	ATOM	8992	OH2	WAT	W	848	64.222	70.580	-5.272	1.00	32.06	W
20	ATOM	8993	OH2	WAT	W	849	46.741	89.756	-23.288	1.00	33.91	W
	ATOM	8994	OH2	WAT	W	850	8.118	53.068	-7.667	1.00	30.58	W
	ATOM	8995	OH2	WAT	W	851	22.086	80.693	-42.196	1.00	29.19	W
	ATOM	8996	OH2	WAT	W	852	63.873	65.397	-30.493	1.00	41.52	W
	ATOM	8997	OH2	WAT	W	853	18.598	48.634	-19.927	1.00	32.70	W
25	ATOM	8998	OH2	WAT	W	854	59.272	76.946	-4.206	1.00	31.52	W
	ATOM	8999	OH2	WAT	W	855	21.016	83.897	-12.178	1.00	32.20	W
	ATOM	9000	OH2	WAT	W	856	55.515	67.407	13.403	1.00	41.93	W
	ATOM	9001	OH2	WAT	W	857	19.239	52.193	-31.228	1.00	36.10	W
	ATOM	9002	OH2	WAT	W	858	67.372	85.521	-35.959	1.00	35.41	W
30	ATOM	9003	OH2	WAT	W	859	29.632	74.968	22.211	1.00	25.23	W
	ATOM	9004	OH2	WAT	W	860	32.821	84.208	0.305	1.00	28.56	W
	ATOM	9005	OH2	WAT	W	861	45.757	65.469	-28.604	1.00	29.35	W
	ATOM	9006	OH2	WAT	W	862	12.983	62.062	-2.298	1.00	27.17	W
	ATOM	9007	OH2	WAT	W	864	25.739	63.240	13.712	1.00	27.83	W
35	ATOM	9008	OH2	WAT	W	865	28.531	34.868	32.152	1.00	30.38	W
	ATOM	9009	OH2	WAT	W	866	35.763	68.453	23.134	1.00	30.35	W
	ATOM	9010	OH2	WAT	W	867	31.861	33.726	17.240	1.00	35.41	W
	ATOM	9011	OH2	WAT	W	868	41.587	84.247	-2.302	1.00	34.07	W
	ATOM	9012	OH2	WAT	W	869	39.915	100.019	-31.828	1.00	38.43	W
40	ATOM	9013	OH2	WAT	W	870	28.436	63.613	10.869	1.00	28.44	W
	ATOM	9014	OH2	WAT	W	871	54.801	82.230	-44.567	1.00	37.79	W
	ATOM	9015	OH2	WAT	W	872	69.905	53.571	-10.383	1.00	29.60	W
	ATOM	9016	OH2	WAT	W	873	36.928	79.069	-2.526	1.00	44.59	W
	ATOM	9017	OH2	WAT	W	874	12.247	64.242	-12.633	1.00	28.33	W
45	ATOM	9018	OH2	WAT	W	875	39.300	50.117	36.307	1.00	33.21	W
	ATOM	9019	OH2	WAT	W	876	28.044	44.594	38.197	1.00	29.80	W
	ATOM	9020	OH2	WAT	W	877	27.720	38.687	-22.666	1.00	30.70	W
	ATOM	9021	OH2	WAT	W	878	72.387	95.667	-31.128	1.00	32.23	W
	ATOM	9022	OH2	WAT	W	879	76.363	46.945	-11.610	1.00	34.32	W
50	ATOM	9023	OH2	WAT	W	880	21.492	48.972	-38.837	1.00	33.31	W
	ATOM	9024	OH2	WAT	W	881	23.344	74.976	-30.166	1.00	33.88	W
	ATOM	9025	OH2	WAT	W	882	20.850	31.662	31.576	1.00	30.80	W
	ATOM	9026	OH2	WAT	W	883	29.614	42.294	-28.740	1.00	39.46	W
	ATOM	9027	OH2	WAT	W	884	42.804	47.450	-27.321	1.00	34.86	W
55	ATOM	9028	OH2	WAT	W	885	55.814	51.939	27.423	1.00	30.74	W
	ATOM	9029	OH2	WAT	W	886	31.683	58.884	-40.938	1.00	50.66	W
	ATOM	9030	OH2	WAT	W	887	18.480	42.922	27.406	1.00	25.20	W
	ATOM	9031	OH2	WAT	W	888	62.075	81.573	-44.200	1.00	40.76	W
	ATOM	9032	OH2	WAT	W	889	7.465	54.408	17.306	1.00	30.35	W

5	ATOM	9033	OH2	WAT	W	890	18.101	41.684	25.245	1.00	32.73	W
	ATOM	9034	OH2	WAT	W	891	27.429	82.562	5.738	1.00	36.27	W
	ATOM	9035	OH2	WAT	W	892	38.868	53.058	1.997	1.00	30.70	W
	ATOM	9036	OH2	WAT	W	893	12.036	67.258	2.652	1.00	42.94	W
	ATOM	9037	OH2	WAT	W	894	4.469	56.610	-6.387	1.00	29.55	W
10	ATOM	9038	OH2	WAT	W	895	21.857	76.782	8.689	1.00	31.52	W
	ATOM	9039	OH2	WAT	W	896	25.676	87.966	-42.799	1.00	39.01	W
	ATOM	9040	OH2	WAT	W	897	10.540	62.431	-12.196	1.00	31.66	W
	ATOM	9041	OH2	WAT	W	898	44.607	72.169	-44.474	1.00	32.45	W
	ATOM	9042	OH2	WAT	W	899	37.212	39.898	26.577	1.00	34.20	W
15	ATOM	9043	OH2	WAT	W	900	23.165	88.711	-37.906	1.00	35.10	W
	ATOM	9044	OH2	WAT	W	901	70.029	62.747	-24.229	1.00	35.37	W
	ATOM	9045	OH2	WAT	W	902	23.331	65.414	18.401	1.00	33.45	W
	ATOM	9046	OH2	WAT	W	903	67.038	38.543	-9.645	1.00	29.50	W
	ATOM	9047	OH2	WAT	W	904	65.467	87.593	-41.084	1.00	36.40	W
20	ATOM	9048	OH2	WAT	W	905	14.017	43.333	28.865	1.00	35.15	W
	ATOM	9049	OH2	WAT	W	906	13.469	48.254	1.397	1.00	37.34	W
	ATOM	9050	OH2	WAT	W	907	55.436	69.137	-37.827	1.00	30.40	W
	ATOM	9051	OH2	WAT	W	908	26.966	47.556	-23.954	1.00	29.40	W
	ATOM	9052	OH2	WAT	W	909	69.728	82.023	-33.947	1.00	32.27	W
25	ATOM	9053	OH2	WAT	W	910	11.998	62.183	22.815	1.00	38.70	W
	ATOM	9054	OH2	WAT	W	911	30.793	29.732	5.534	1.00	37.65	W
	ATOM	9055	OH2	WAT	W	912	19.179	36.459	22.322	1.00	40.49	W
	ATOM	9056	OH2	WAT	W	913	27.736	86.412	-14.732	1.00	31.73	W
	ATOM	9057	OH2	WAT	W	914	66.117	50.416	0.413	1.00	30.39	W
30	ATOM	9058	OH2	WAT	W	915	28.492	63.881	13.983	1.00	29.55	W
	ATOM	9059	OH2	WAT	W	916	51.974	60.105	28.076	1.00	30.69	W
	ATOM	9060	OH2	WAT	W	917	52.332	72.483	18.319	1.00	29.21	W
	ATOM	9061	OH2	WAT	W	918	47.072	74.947	-26.272	1.00	30.57	W
	ATOM	9062	OH2	WAT	W	919	65.371	81.208	-4.746	1.00	32.50	W
35	ATOM	9063	OH2	WAT	W	920	48.492	72.168	-26.185	1.00	32.28	W
	ATOM	9064	OH2	WAT	W	921	59.945	68.604	-38.880	1.00	29.65	W
	ATOM	9065	OH2	WAT	W	922	22.864	85.051	-16.984	1.00	38.49	W
	ATOM	9066	OH2	WAT	W	923	25.956	76.250	-38.830	1.00	30.40	W
	ATOM	9067	OH2	WAT	W	924	20.018	73.946	-28.969	1.00	42.04	W
40	ATOM	9068	OH2	WAT	W	925	59.188	55.422	27.104	1.00	33.12	W
	ATOM	9069	OH2	WAT	W	926	44.334	87.421	-15.927	1.00	42.21	W
	ATOM	9070	OH2	WAT	W	927	64.029	76.889	-40.494	1.00	32.61	W
	ATOM	9071	OH2	WAT	W	928	14.068	58.271	16.406	1.00	21.84	W
	ATOM	9072	OH2	WAT	W	929	13.929	57.640	19.009	1.00	21.02	W
45	ATOM	9073	OH2	WAT	W	930	24.125	63.343	11.562	1.00	29.26	W
	ATOM	9074	OH2	WAT	W	931	28.117	39.644	11.297	1.00	15.34	W
	ATOM	9075	OH2	WAT	W	932	28.948	81.833	-35.632	1.00	24.97	W
	ATOM	9076	OH2	WAT	W	1000	12.359	55.778	-15.197	1.00	19.33	W
	ATOM	9077	OH2	WAT	W	1001	81.546	66.995	-13.758	1.00	21.02	W
50	ATOM	9078	OH2	WAT	W	1002	59.050	58.105	0.971	1.00	20.10	W
	ATOM	9079	OH2	WAT	W	1003	49.194	68.129	6.727	1.00	24.02	W
	ATOM	9080	OH2	WAT	W	1004	68.412	79.523	-28.528	1.00	22.06	W
	ATOM	9081	OH2	WAT	W	1005	26.119	32.717	28.755	1.00	25.06	W
	ATOM	9082	OH2	WAT	W	1006	32.842	69.360	24.703	1.00	23.57	W
55	ATOM	9083	OH2	WAT	W	1007	27.842	102.244	-19.194	1.00	26.24	W
	ATOM	9084	OH2	WAT	W	1008	71.801	73.870	-29.215	1.00	26.76	W
	ATOM	9085	OH2	WAT	W	1009	79.342	50.598	-8.845	1.00	28.86	W
	ATOM	9086	OH2	WAT	W	1010	37.052	83.691	-3.974	1.00	26.37	W
	ATOM	9087	OH2	WAT	W	1011	59.408	51.958	2.554	1.00	28.10	W

5	ATOM	9088	OH2	WAT	W1012	19.601	84.239	-18.370	1.00	28.43	W
	ATOM	9089	OH2	WAT	W1013	43.956	79.243	-21.470	1.00	32.67	W
	ATOM	9090	OH2	WAT	W1014	58.023	52.829	26.220	1.00	28.82	W
	ATOM	9091	OH2	WAT	W1015	17.061	57.454	-36.404	1.00	28.26	W
	ATOM	9092	OH2	WAT	W1016	46.665	43.031	9.625	1.00	30.00	W
10	ATOM	9093	OH2	WAT	W1017	27.197	72.121	34.046	1.00	34.22	W
	ATOM	9094	OH2	WAT	W1018	7.536	54.149	-10.230	1.00	25.55	W
	ATOM	9095	OH2	WAT	W1019	24.878	52.245	43.415	1.00	40.21	W
	ATOM	9096	OH2	WAT	W1020	49.909	46.879	-30.749	1.00	31.80	W
	ATOM	9097	OH2	WAT	W1021	42.581	78.539	-29.540	1.00	35.27	W
15	ATOM	9098	OH2	WAT	W1022	27.591	88.817	-12.263	1.00	30.74	W
	ATOM	9099	OH2	WAT	W1023	56.603	89.918	-43.608	1.00	30.70	W
	ATOM	9100	OH2	WAT	W1024	13.964	44.811	26.794	1.00	36.36	W
	ATOM	9101	OH2	WAT	W1025	69.388	83.796	-35.992	1.00	27.38	W
	ATOM	9102	OH2	WAT	W1026	57.993	93.302	-24.988	1.00	27.86	W
20	ATOM	9103	OH2	WAT	W1027	64.598	70.559	-7.944	1.00	45.98	W
	ATOM	9104	OH2	WAT	W1028	46.112	39.784	-0.055	1.00	27.99	W
	ATOM	9105	OH2	WAT	W1029	37.083	37.317	25.012	1.00	33.64	W
	ATOM	9106	OH2	WAT	W1030	52.414	68.316	4.826	1.00	31.30	W
	ATOM	9107	OH2	WAT	W1031	17.744	50.810	38.215	1.00	29.84	W
25	ATOM	9108	OH2	WAT	W1032	15.243	76.915	-13.620	1.00	29.17	W
	ATOM	9109	OH2	WAT	W1033	20.102	39.479	-12.507	1.00	34.90	W
	ATOM	9110	OH2	WAT	W1034	49.415	45.555	31.017	1.00	29.53	W
	ATOM	9111	OH2	WAT	W1035	46.778	72.403	-17.522	1.00	29.14	W
	ATOM	9112	OH2	WAT	W1036	70.421	78.009	-26.052	1.00	28.22	W
30	ATOM	9113	OH2	WAT	W1037	58.470	52.894	4.808	1.00	24.37	W
	ATOM	9114	OH2	WAT	W1038	35.575	55.341	-34.684	1.00	34.14	W
	ATOM	9115	OH2	WAT	W1039	41.336	82.761	-28.764	1.00	34.42	W
	ATOM	9116	OH2	WAT	W1040	47.748	66.115	26.835	1.00	30.73	W
	ATOM	9117	OH2	WAT	W1041	28.436	68.129	11.340	1.00	30.03	W
35	ATOM	9118	OH2	WAT	W1043	39.499	81.827	-21.986	1.00	34.41	W
	ATOM	9119	OH2	WAT	W1044	22.020	65.686	32.120	1.00	29.09	W
	ATOM	9120	OH2	WAT	W1045	58.777	48.905	18.951	1.00	31.31	W
	ATOM	9121	OH2	WAT	W1046	31.999	80.814	6.975	1.00	45.48	W
	ATOM	9122	OH2	WAT	W1047	50.409	44.928	-24.885	1.00	35.65	W
40	ATOM	9123	OH2	WAT	W1048	62.308	60.740	0.550	1.00	29.11	W
	ATOM	9124	OH2	WAT	W1049	67.874	75.083	-35.117	1.00	29.34	W
	ATOM	9125	OH2	WAT	W1050	23.178	39.391	-15.604	1.00	36.12	W
	ATOM	9126	OH2	WAT	W1051	35.884	93.525	-29.986	1.00	34.46	W
	ATOM	9127	OH2	WAT	W1052	73.994	79.960	-10.916	1.00	30.75	W
45	ATOM	9128	OH2	WAT	W1053	40.966	81.760	-3.585	1.00	34.92	W
	ATOM	9129	OH2	WAT	W1054	12.972	62.847	12.055	1.00	42.92	W
	ATOM	9130	OH2	WAT	W1055	56.938	75.884	0.308	1.00	32.67	W
	ATOM	9131	OH2	WAT	W1056	74.294	52.058	1.453	1.00	31.78	W
	ATOM	9132	OH2	WAT	W1057	22.310	61.172	-35.052	1.00	32.26	W
50	ATOM	9133	OH2	WAT	W1058	77.454	65.185	-14.847	1.00	28.32	W
	ATOM	9134	OH2	WAT	W1059	17.651	41.747	32.191	1.00	47.09	W
	ATOM	9135	OH2	WAT	W1060	10.105	62.757	-15.140	1.00	33.54	W
	ATOM	9136	OH2	WAT	W1061	46.034	79.593	4.983	1.00	29.18	W
	ATOM	9137	OH2	WAT	W1062	14.610	46.758	32.147	1.00	30.79	W
55	ATOM	9138	OH2	WAT	W1063	34.557	77.270	12.439	1.00	27.02	W
	ATOM	9139	OH2	WAT	W1064	47.268	40.156	6.116	1.00	33.32	W
	ATOM	9140	OH2	WAT	W1065	18.619	39.189	-2.666	1.00	33.06	W
	ATOM	9141	OH2	WAT	W1066	26.043	58.928	-38.980	1.00	35.17	W
	ATOM	9142	OH2	WAT	W1067	10.705	57.867	-20.854	1.00	35.84	W

Table 2

Structural coordinates of a *Drosophila* Golgi α -mannosidase II with swainsonine.

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5  REMARK coordinates from restrained individual B-factor refinement
   REMARK refinement resolution: 500.0 - 1.87 A
   REMARK starting r= 0.1835 free_r= 0.2089
   REMARK final    r= 0.1801 free_r= 0.2084
   REMARK B rmsd for bonded mainchain atoms=  0.707  target= 1.5
   REMARK B rmsd for bonded sidechain atoms=  1.139  target= 2.0
10  REMARK B rmsd for angle mainchain atoms=  1.167  target= 2.0
   REMARK B rmsd for angle sidechain atoms=  1.765  target= 2.5
   REMARK wa= 1.14241
   REMARK rweight=0.269445
   REMARK target= mlf  steps= 30
15  REMARK sg= P2(1)2(1)2(1) a= 68.902 b= 110.015 c= 138.472 alpha= 90 beta= 90
   gamma= 90
   REMARK parameter file 1 : CNS_TOPPAR:protein_rep.param
   REMARK parameter file 2 : CNS_TOPPAR:water_rep.param
   REMARK parameter file 3 : CNS_TOPPAR:ion.param
20  REMARK parameter file 4 : swainsonine2.par
   REMARK parameter file 5 : ../zntrmp/mpd.par
   REMARK parameter file 6 : cis_peptide.param
   REMARK parameter file 7 : CNS_TOPPAR:carbohydrate.param
   REMARK molecular structure file: swainsoninegen.mtf
25  REMARK input coordinates: swainsonine_ann_1.pdb
   REMARK reflection file= dgm2native_rejmerge.cv
   REMARK ncs= none
   REMARK B-correction resolution: 6.0 - 1.87
   REMARK initial B-factor correction applied to fobs :
30  REMARK B11=  0.513 B22= -0.085 B33= -0.428
   REMARK B12=  0.000 B13=  0.000 B23=  0.000
   REMARK B-factor correction applied to coordinate array B:  -0.306
   REMARK bulk solvent: density level= 0.353213 e/A^3, B-factor= 42.0423 A^2
   REMARK reflections with |Fobs|/sigma_F < 0.0 rejected
35  REMARK reflections with |Fobs| > 10000 * rms(Fobs) rejected
   REMARK theoretical total number of refl. in resol. range:      87643 ( 100.0
% )
   REMARK number of unobserved reflections (no entry or |F|=0):    2814 (3.2%)
   REMARK number of reflections rejected:                          0 (0.0%)
40  REMARK total number of reflections used:                        84829 (96.8%)
   REMARK number of reflections in working set:                    80543 (91.9%)
   REMARK number of reflections in test set:                       4286 (4.9%)
   CRYST1  68.902 110.015 138.472 90.00 90.00 90.00 P 21 21 21
   REMARK FILENAME="swainsonine_ann_lbi.pdb"
45  REMARK DATE:15-Jul-2000 00:41:05      created by user: jvdelsen
   REMARK VERSION:0.9a
   ATOM      1  C  CYS A  31      41.925  37.251 -18.672  1.00 24.62      A
   ATOM      2  O  CYS A  31      41.435  36.638 -19.619  1.00 24.13      A
   ATOM      3  CB CYS A  31      43.816  38.560 -19.547  1.00 23.99      A
50  ATOM      4  SG CYS A  31      45.498  39.239 -19.413  1.00 23.62      A
   ATOM      5  N  CYS A  31      44.191  36.197 -18.869  1.00 25.37      A
   ATOM      6  CA CYS A  31      43.431  37.448 -18.573  1.00 24.59      A

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5	ATOM	7	N	GLN	A	32	41.195	37.782	-17.695	1.00	24.51	A
	ATOM	8	CA	GLN	A	32	39.740	37.694	-17.701	1.00	24.50	A
	ATOM	9	CB	GLN	A	32	39.148	38.167	-16.372	1.00	25.89	A
	ATOM	10	CG	GLN	A	32	39.164	37.148	-15.257	1.00	28.92	A
	ATOM	11	CD	GLN	A	32	38.247	37.547	-14.117	1.00	30.46	A
10	ATOM	12	OE1	GLN	A	32	37.028	37.625	-14.286	1.00	31.32	A
	ATOM	13	NE2	GLN	A	32	38.827	37.811	-12.951	1.00	31.69	A
	ATOM	14	C	GLN	A	32	39.201	38.595	-18.801	1.00	23.50	A
	ATOM	15	O	GLN	A	32	39.787	39.632	-19.112	1.00	22.91	A
	ATOM	16	N	ASP	A	33	38.084	38.194	-19.389	1.00	22.48	A
15	ATOM	17	CA	ASP	A	33	37.455	38.986	-20.432	1.00	21.66	A
	ATOM	18	CB	ASP	A	33	36.645	38.066	-21.350	1.00	21.90	A
	ATOM	19	CG	ASP	A	33	36.033	38.799	-22.524	1.00	23.08	A
	ATOM	20	OD1	ASP	A	33	35.768	38.140	-23.553	1.00	22.70	A
	ATOM	21	OD2	ASP	A	33	35.804	40.023	-22.415	1.00	23.45	A
20	ATOM	22	C	ASP	A	33	36.554	39.956	-19.671	1.00	20.60	A
	ATOM	23	O	ASP	A	33	35.617	39.536	-18.999	1.00	21.58	A
	ATOM	24	N	VAL	A	34	36.846	41.250	-19.759	1.00	18.58	A
	ATOM	25	CA	VAL	A	34	36.066	42.246	-19.030	1.00	16.33	A
	ATOM	26	CB	VAL	A	34	36.971	43.414	-18.559	1.00	16.29	A
25	ATOM	27	CG1	VAL	A	34	38.137	42.869	-17.752	1.00	16.34	A
	ATOM	28	CG2	VAL	A	34	37.493	44.200	-19.760	1.00	15.50	A
	ATOM	29	C	VAL	A	34	34.895	42.818	-19.819	1.00	15.89	A
	ATOM	30	O	VAL	A	34	34.213	43.728	-19.353	1.00	14.74	A
	ATOM	31	N	VAL	A	35	34.641	42.268	-21.001	1.00	14.60	A
30	ATOM	32	CA	VAL	A	35	33.559	42.769	-21.837	1.00	15.46	A
	ATOM	33	CB	VAL	A	35	34.095	43.167	-23.237	1.00	15.53	A
	ATOM	34	CG1	VAL	A	35	32.950	43.676	-24.118	1.00	15.86	A
	ATOM	35	CG2	VAL	A	35	35.188	44.216	-23.098	1.00	14.85	A
	ATOM	36	C	VAL	A	35	32.383	41.821	-22.065	1.00	16.31	A
35	ATOM	37	O	VAL	A	35	31.225	42.207	-21.908	1.00	15.61	A
	ATOM	38	N	GLN	A	36	32.692	40.579	-22.418	1.00	17.91	A
	ATOM	39	CA	GLN	A	36	31.673	39.590	-22.771	1.00	19.46	A
	ATOM	40	CB	GLN	A	36	32.219	38.736	-23.913	1.00	19.69	A
	ATOM	41	CG	GLN	A	36	32.976	39.558	-24.943	1.00	20.71	A
40	ATOM	42	CD	GLN	A	36	33.442	38.735	-26.117	1.00	21.13	A
	ATOM	43	OE1	GLN	A	36	32.667	38.436	-27.022	1.00	22.57	A
	ATOM	44	NE2	GLN	A	36	34.714	38.355	-26.106	1.00	21.31	A
	ATOM	45	C	GLN	A	36	31.065	38.670	-21.721	1.00	20.47	A
	ATOM	46	O	GLN	A	36	30.117	37.948	-22.023	1.00	20.77	A
45	ATOM	47	N	ASP	A	37	31.593	38.674	-20.504	1.00	21.45	A
	ATOM	48	CA	ASP	A	37	31.051	37.811	-19.459	1.00	22.08	A
	ATOM	49	CB	ASP	A	37	32.147	36.912	-18.869	1.00	23.31	A
	ATOM	50	CG	ASP	A	37	32.736	35.956	-19.887	1.00	24.58	A
	ATOM	51	OD1	ASP	A	37	31.959	35.302	-20.610	1.00	25.48	A
50	ATOM	52	OD2	ASP	A	37	33.979	35.851	-19.955	1.00	25.49	A
	ATOM	53	C	ASP	A	37	30.416	38.614	-18.330	1.00	21.91	A
	ATOM	54	O	ASP	A	37	31.120	39.195	-17.506	1.00	22.46	A
	ATOM	55	N	VAL	A	38	29.088	38.635	-18.292	1.00	21.35	A
	ATOM	56	CA	VAL	A	38	28.363	39.354	-17.249	1.00	21.02	A
55	ATOM	57	CB	VAL	A	38	26.860	39.448	-17.578	1.00	21.79	A
	ATOM	58	CG1	VAL	A	38	26.122	40.191	-16.466	1.00	21.12	A
	ATOM	59	CG2	VAL	A	38	26.669	40.156	-18.916	1.00	21.34	A
	ATOM	60	C	VAL	A	38	28.523	38.633	-15.912	1.00	21.06	A
	ATOM	61	O	VAL	A	38	28.042	37.511	-15.734	1.00	20.07	A

5	ATOM	62	N	PRO	A	39	29.209	39.268	-14.951	1.00	20.56	A
	ATOM	63	CD	PRO	A	39	29.929	40.552	-15.034	1.00	20.77	A
	ATOM	64	CA	PRO	A	39	29.407	38.646	-13.640	1.00	20.50	A
	ATOM	65	CB	PRO	A	39	30.153	39.725	-12.858	1.00	20.74	A
	ATOM	66	CG	PRO	A	39	30.950	40.416	-13.922	1.00	19.82	A
10	ATOM	67	C	PRO	A	39	28.100	38.255	-12.962	1.00	20.83	A
	ATOM	68	O	PRO	A	39	27.092	38.957	-13.066	1.00	20.74	A
	ATOM	69	N	ASN	A	40	28.114	37.120	-12.273	1.00	21.49	A
	ATOM	70	CA	ASN	A	40	26.931	36.674	-11.555	1.00	21.21	A
	ATOM	71	CB	ASN	A	40	26.737	35.166	-11.702	1.00	23.69	A
15	ATOM	72	CG	ASN	A	40	25.572	34.653	-10.881	1.00	25.91	A
	ATOM	73	OD1	ASN	A	40	24.457	35.173	-10.971	1.00	28.05	A
	ATOM	74	ND2	ASN	A	40	25.820	33.629	-10.073	1.00	27.66	A
	ATOM	75	C	ASN	A	40	27.119	37.023	-10.085	1.00	20.01	A
	ATOM	76	O	ASN	A	40	27.906	36.386	-9.384	1.00	19.40	A
20	ATOM	77	N	VAL	A	41	26.405	38.040	-9.620	1.00	18.76	A
	ATOM	78	CA	VAL	A	41	26.515	38.459	-8.227	1.00	17.66	A
	ATOM	79	CB	VAL	A	41	27.126	39.873	-8.117	1.00	17.28	A
	ATOM	80	CG1	VAL	A	41	28.559	39.861	-8.627	1.00	17.55	A
	ATOM	81	CG2	VAL	A	41	26.291	40.860	-8.919	1.00	17.64	A
25	ATOM	82	C	VAL	A	41	25.154	38.454	-7.545	1.00	16.81	A
	ATOM	83	O	VAL	A	41	24.118	38.550	-8.202	1.00	16.76	A
	ATOM	84	N	ASP	A	42	25.161	38.333	-6.223	1.00	16.37	A
	ATOM	85	CA	ASP	A	42	23.922	38.315	-5.459	1.00	16.16	A
	ATOM	86	CB	ASP	A	42	24.204	37.903	-4.012	1.00	17.05	A
30	ATOM	87	CG	ASP	A	42	24.742	36.488	-3.906	1.00	17.52	A
	ATOM	88	OD1	ASP	A	42	24.073	35.565	-4.414	1.00	18.85	A
	ATOM	89	OD2	ASP	A	42	25.824	36.297	-3.316	1.00	17.26	A
	ATOM	90	C	ASP	A	42	23.255	39.681	-5.484	1.00	16.06	A
	ATOM	91	O	ASP	A	42	22.029	39.786	-5.518	1.00	16.22	A
35	ATOM	92	N	VAL	A	43	24.071	40.729	-5.459	1.00	15.36	A
	ATOM	93	CA	VAL	A	43	23.563	42.092	-5.486	1.00	15.17	A
	ATOM	94	CB	VAL	A	43	23.726	42.788	-4.118	1.00	15.84	A
	ATOM	95	CG1	VAL	A	43	23.132	44.194	-4.175	1.00	15.15	A
	ATOM	96	CG2	VAL	A	43	23.059	41.968	-3.024	1.00	16.17	A
40	ATOM	97	C	VAL	A	43	24.315	42.920	-6.521	1.00	14.54	A
	ATOM	98	O	VAL	A	43	25.540	43.030	-6.470	1.00	14.32	A
	ATOM	99	N	GLN	A	44	23.578	43.480	-7.472	1.00	13.35	A
	ATOM	100	CA	GLN	A	44	24.173	44.329	-8.497	1.00	13.57	A
	ATOM	101	CB	GLN	A	44	23.958	43.724	-9.889	1.00	13.33	A
45	ATOM	102	CG	GLN	A	44	25.023	44.140	-10.898	1.00	12.33	A
	ATOM	103	CD	GLN	A	44	25.129	45.649	-11.016	1.00	12.76	A
	ATOM	104	OE1	GLN	A	44	24.145	46.325	-11.302	1.00	12.19	A
	ATOM	105	NE2	GLN	A	44	26.325	46.184	-10.792	1.00	11.46	A
	ATOM	106	C	GLN	A	44	23.413	45.642	-8.323	1.00	13.24	A
50	ATOM	107	O	GLN	A	44	22.210	45.717	-8.576	1.00	13.21	A
	ATOM	108	N	MET	A	45	24.118	46.675	-7.874	1.00	13.15	A
	ATOM	109	CA	MET	A	45	23.485	47.952	-7.577	1.00	13.00	A
	ATOM	110	CB	MET	A	45	24.536	48.945	-7.075	1.00	13.03	A
	ATOM	111	CG	MET	A	45	25.143	48.547	-5.728	1.00	13.17	A
55	ATOM	112	SD	MET	A	45	23.891	48.155	-4.467	1.00	15.24	A
	ATOM	113	CE	MET	A	45	23.318	49.806	-4.040	1.00	14.85	A
	ATOM	114	C	MET	A	45	22.593	48.603	-8.632	1.00	12.70	A
	ATOM	115	O	MET	A	45	21.596	49.231	-8.278	1.00	12.29	A
	ATOM	116	N	LEU	A	46	22.929	48.469	-9.911	1.00	12.61	A

5	ATOM	117	CA	LEU	A	46	22.087	49.066	-10.947	1.00	13.13	A
	ATOM	118	CB	LEU	A	46	22.778	49.012	-12.316	1.00	12.68	A
	ATOM	119	CG	LEU	A	46	22.021	49.708	-13.456	1.00	11.38	A
	ATOM	120	CD1	LEU	A	46	21.998	51.215	-13.217	1.00	12.44	A
	ATOM	121	CD2	LEU	A	46	22.686	49.394	-14.788	1.00	12.03	A
10	ATOM	122	C	LEU	A	46	20.770	48.290	-11.003	1.00	14.23	A
	ATOM	123	O	LEU	A	46	19.687	48.876	-11.131	1.00	14.08	A
	ATOM	124	N	GLU	A	47	20.867	46.966	-10.895	1.00	15.02	A
	ATOM	125	CA	GLU	A	47	19.682	46.114	-10.929	1.00	16.69	A
	ATOM	126	CB	GLU	A	47	20.087	44.635	-10.951	1.00	17.61	A
15	ATOM	127	CG	GLU	A	47	18.929	43.666	-11.196	1.00	20.72	A
	ATOM	128	CD	GLU	A	47	18.124	43.357	-9.947	1.00	22.35	A
	ATOM	129	OE1	GLU	A	47	17.009	42.805	-10.080	1.00	23.46	A
	ATOM	130	OE2	GLU	A	47	18.601	43.648	-8.831	1.00	23.19	A
	ATOM	131	C	GLU	A	47	18.824	46.414	-9.705	1.00	16.45	A
20	ATOM	132	O	GLU	A	47	17.609	46.569	-9.812	1.00	17.05	A
	ATOM	133	N	LEU	A	48	19.465	46.511	-8.545	1.00	16.44	A
	ATOM	134	CA	LEU	A	48	18.755	46.809	-7.304	1.00	16.52	A
	ATOM	135	CB	LEU	A	48	19.737	46.869	-6.128	1.00	16.70	A
	ATOM	136	CG	LEU	A	48	19.127	47.139	-4.748	1.00	17.63	A
25	ATOM	137	CD1	LEU	A	48	18.115	46.053	-4.415	1.00	19.01	A
	ATOM	138	CD2	LEU	A	48	20.225	47.188	-3.695	1.00	18.67	A
	ATOM	139	C	LEU	A	48	18.019	48.141	-7.420	1.00	16.10	A
	ATOM	140	O	LEU	A	48	16.859	48.254	-7.029	1.00	16.36	A
	ATOM	141	N	TYR	A	49	18.694	49.145	-7.968	1.00	15.59	A
30	ATOM	142	CA	TYR	A	49	18.093	50.466	-8.127	1.00	15.59	A
	ATOM	143	CB	TYR	A	49	19.121	51.445	-8.712	1.00	14.86	A
	ATOM	144	CG	TYR	A	49	19.675	52.401	-7.678	1.00	14.18	A
	ATOM	145	CD1	TYR	A	49	20.150	51.929	-6.451	1.00	13.14	A
	ATOM	146	CE1	TYR	A	49	20.600	52.807	-5.464	1.00	13.25	A
35	ATOM	147	CD2	TYR	A	49	19.672	53.779	-7.899	1.00	13.52	A
	ATOM	148	CE2	TYR	A	49	20.120	54.666	-6.920	1.00	13.75	A
	ATOM	149	CZ	TYR	A	49	20.578	54.175	-5.706	1.00	13.51	A
	ATOM	150	OH	TYR	A	49	20.979	55.051	-4.723	1.00	13.85	A
	ATOM	151	C	TYR	A	49	16.850	50.415	-9.009	1.00	16.60	A
40	ATOM	152	O	TYR	A	49	15.879	51.136	-8.779	1.00	15.53	A
	ATOM	153	N	ASP	A	50	16.883	49.547	-10.012	1.00	17.82	A
	ATOM	154	CA	ASP	A	50	15.764	49.399	-10.931	1.00	20.30	A
	ATOM	155	CB	ASP	A	50	16.153	48.440	-12.061	1.00	21.45	A
	ATOM	156	CG	ASP	A	50	15.329	48.645	-13.318	1.00	23.77	A
45	ATOM	157	OD1	ASP	A	50	15.403	47.778	-14.215	1.00	24.48	A
	ATOM	158	OD2	ASP	A	50	14.626	49.674	-13.418	1.00	23.86	A
	ATOM	159	C	ASP	A	50	14.526	48.868	-10.198	1.00	21.12	A
	ATOM	160	O	ASP	A	50	13.403	49.294	-10.476	1.00	20.00	A
	ATOM	161	N	ARG	A	51	14.741	47.951	-9.256	1.00	22.14	A
50	ATOM	162	CA	ARG	A	51	13.651	47.336	-8.494	1.00	23.40	A
	ATOM	163	CB	ARG	A	51	14.044	45.918	-8.059	1.00	25.60	A
	ATOM	164	CG	ARG	A	51	14.163	44.925	-9.192	1.00	28.61	A
	ATOM	165	CD	ARG	A	51	14.338	43.491	-8.689	1.00	31.12	A
	ATOM	166	NE	ARG	A	51	15.625	43.263	-8.034	1.00	33.00	A
55	ATOM	167	CZ	ARG	A	51	15.868	43.467	-6.743	1.00	33.65	A
	ATOM	168	NH1	ARG	A	51	14.908	43.906	-5.940	1.00	34.72	A
	ATOM	169	NH2	ARG	A	51	17.077	43.228	-6.253	1.00	33.58	A
	ATOM	170	C	ARG	A	51	13.156	48.096	-7.262	1.00	23.04	A
	ATOM	171	O	ARG	A	51	11.979	48.014	-6.921	1.00	23.00	A

5	ATOM	172	N	MET	A	52	14.047	48.820	-6.591	1.00	22.18	A
	ATOM	173	CA	MET	A	52	13.680	49.564	-5.385	1.00	22.46	A
	ATOM	174	CB	MET	A	52	14.924	50.192	-4.757	1.00	22.88	A
	ATOM	175	CG	MET	A	52	15.886	49.195	-4.152	1.00	24.34	A
	ATOM	176	SD	MET	A	52	17.406	50.015	-3.629	1.00	25.98	A
10	ATOM	177	CE	MET	A	52	16.778	51.075	-2.331	1.00	26.01	A
	ATOM	178	C	MET	A	52	12.642	50.652	-5.617	1.00	21.82	A
	ATOM	179	O	MET	A	52	12.606	51.271	-6.681	1.00	21.80	A
	ATOM	180	N	SER	A	53	11.810	50.894	-4.606	1.00	21.18	A
	ATOM	181	CA	SER	A	53	10.762	51.908	-4.696	1.00	21.22	A
15	ATOM	182	CB	SER	A	53	9.477	51.386	-4.048	1.00	21.76	A
	ATOM	183	OG	SER	A	53	8.985	50.253	-4.745	1.00	23.57	A
	ATOM	184	C	SER	A	53	11.156	53.238	-4.055	1.00	20.40	A
	ATOM	185	O	SER	A	53	10.531	54.267	-4.311	1.00	20.31	A
	ATOM	186	N	PHE	A	54	12.185	53.204	-3.214	1.00	19.97	A
20	ATOM	187	CA	PHE	A	54	12.686	54.399	-2.538	1.00	19.35	A
	ATOM	188	CB	PHE	A	54	13.354	55.343	-3.545	1.00	18.86	A
	ATOM	189	CG	PHE	A	54	14.600	54.784	-4.174	1.00	17.89	A
	ATOM	190	CD1	PHE	A	54	14.522	53.912	-5.256	1.00	17.68	A
	ATOM	191	CD2	PHE	A	54	15.852	55.127	-3.677	1.00	17.36	A
25	ATOM	192	CE1	PHE	A	54	15.674	53.387	-5.837	1.00	17.70	A
	ATOM	193	CE2	PHE	A	54	17.015	54.609	-4.247	1.00	17.77	A
	ATOM	194	CZ	PHE	A	54	16.929	53.736	-5.329	1.00	18.12	A
	ATOM	195	C	PHE	A	54	11.644	55.188	-1.747	1.00	19.63	A
	ATOM	196	O	PHE	A	54	11.729	56.414	-1.660	1.00	18.67	A
30	ATOM	197	N	LYS	A	55	10.664	54.504	-1.165	1.00	19.83	A
	ATOM	198	CA	LYS	A	55	9.653	55.211	-0.387	1.00	20.73	A
	ATOM	199	CB	LYS	A	55	8.437	54.313	-0.134	1.00	20.77	A
	ATOM	200	CG	LYS	A	55	7.748	53.848	-1.403	1.00	20.88	A
	ATOM	201	CD	LYS	A	55	7.336	55.018	-2.284	1.00	21.60	A
35	ATOM	202	CE	LYS	A	55	6.699	54.527	-3.578	1.00	21.98	A
	ATOM	203	NZ	LYS	A	55	6.215	55.652	-4.429	1.00	21.47	A
	ATOM	204	C	LYS	A	55	10.265	55.652	0.936	1.00	20.90	A
	ATOM	205	O	LYS	A	55	10.925	54.870	1.615	1.00	21.59	A
	ATOM	206	N	ASP	A	56	10.045	56.912	1.291	1.00	21.05	A
40	ATOM	207	CA	ASP	A	56	10.582	57.478	2.522	1.00	21.70	A
	ATOM	208	CB	ASP	A	56	11.094	58.897	2.234	1.00	20.78	A
	ATOM	209	CG	ASP	A	56	11.697	59.567	3.450	1.00	20.27	A
	ATOM	210	OD1	ASP	A	56	12.238	58.861	4.324	1.00	20.21	A
	ATOM	211	OD2	ASP	A	56	11.642	60.812	3.523	1.00	20.23	A
45	ATOM	212	C	ASP	A	56	9.520	57.493	3.622	1.00	22.51	A
	ATOM	213	O	ASP	A	56	8.954	58.536	3.939	1.00	23.55	A
	ATOM	214	N	ILE	A	57	9.251	56.331	4.207	1.00	23.05	A
	ATOM	215	CA	ILE	A	57	8.245	56.249	5.259	1.00	23.95	A
	ATOM	216	CB	ILE	A	57	7.368	54.981	5.114	1.00	25.04	A
50	ATOM	217	CG2	ILE	A	57	6.858	54.859	3.681	1.00	24.66	A
	ATOM	218	CG1	ILE	A	57	8.172	53.737	5.485	1.00	25.72	A
	ATOM	219	CD1	ILE	A	57	7.335	52.480	5.564	1.00	27.21	A
	ATOM	220	C	ILE	A	57	8.869	56.250	6.647	1.00	23.45	A
	ATOM	221	O	ILE	A	57	10.022	55.859	6.824	1.00	23.83	A
55	ATOM	222	N	ASP	A	58	8.091	56.698	7.627	1.00	23.42	A
	ATOM	223	CA	ASP	A	58	8.528	56.758	9.017	1.00	23.11	A
	ATOM	224	CB	ASP	A	58	7.566	57.641	9.815	1.00	24.05	A
	ATOM	225	CG	ASP	A	58	7.986	57.817	11.264	1.00	24.91	A
	ATOM	226	OD1	ASP	A	58	7.391	58.677	11.948	1.00	26.86	A

5	ATOM	227	OD2	ASP	A	58	8.898	57.102	11.725	1.00	24.36	A
	ATOM	228	C	ASP	A	58	8.552	55.347	9.599	1.00	22.47	A
	ATOM	229	O	ASP	A	58	7.503	54.736	9.798	1.00	22.40	A
	ATOM	230	N	GLY	A	59	9.749	54.835	9.871	1.00	21.17	A
	ATOM	231	CA	GLY	A	59	9.870	53.491	10.411	1.00	20.10	A
10	ATOM	232	C	GLY	A	59	9.836	53.398	11.926	1.00	18.92	A
	ATOM	233	O	GLY	A	59	10.040	52.321	12.486	1.00	18.96	A
	ATOM	234	N	GLY	A	60	9.576	54.518	12.592	1.00	18.14	A
	ATOM	235	CA	GLY	A	60	9.529	54.523	14.045	1.00	18.27	A
	ATOM	236	C	GLY	A	60	10.796	55.130	14.620	1.00	17.46	A
15	ATOM	237	O	GLY	A	60	11.352	56.062	14.038	1.00	17.61	A
	ATOM	238	N	VAL	A	61	11.264	54.612	15.752	1.00	17.48	A
	ATOM	239	CA	VAL	A	61	12.484	55.146	16.349	1.00	16.59	A
	ATOM	240	CB	VAL	A	61	12.865	54.402	17.653	1.00	16.73	A
	ATOM	241	CG1	VAL	A	61	11.824	54.706	18.728	1.00	16.60	A
20	ATOM	242	CG2	VAL	A	61	12.957	52.904	17.413	1.00	16.85	A
	ATOM	243	C	VAL	A	61	13.613	55.075	15.321	1.00	16.90	A
	ATOM	244	O	VAL	A	61	14.443	55.981	15.244	1.00	16.19	A
	ATOM	245	N	TRP	A	62	13.651	53.998	14.537	1.00	16.72	A
	ATOM	246	CA	TRP	A	62	14.641	53.903	13.470	1.00	17.14	A
25	ATOM	247	CB	TRP	A	62	15.017	52.448	13.160	1.00	16.77	A
	ATOM	248	CG	TRP	A	62	15.981	52.323	11.999	1.00	16.61	A
	ATOM	249	CD2	TRP	A	62	16.334	51.125	11.291	1.00	16.64	A
	ATOM	250	CE2	TRP	A	62	17.238	51.495	10.266	1.00	16.47	A
	ATOM	251	CE3	TRP	A	62	15.974	49.776	11.421	1.00	16.05	A
30	ATOM	252	CD1	TRP	A	62	16.671	53.339	11.393	1.00	16.29	A
	ATOM	253	NE1	TRP	A	62	17.424	52.850	10.351	1.00	16.78	A
	ATOM	254	CZ2	TRP	A	62	17.786	50.565	9.376	1.00	15.87	A
	ATOM	255	CZ3	TRP	A	62	16.518	48.849	10.537	1.00	15.80	A
	ATOM	256	CH2	TRP	A	62	17.416	49.249	9.525	1.00	16.42	A
35	ATOM	257	C	TRP	A	62	13.854	54.516	12.319	1.00	17.81	A
	ATOM	258	O	TRP	A	62	13.199	53.816	11.542	1.00	18.20	A
	ATOM	259	N	LYS	A	63	13.904	55.841	12.241	1.00	18.39	A
	ATOM	260	CA	LYS	A	63	13.159	56.598	11.243	1.00	18.98	A
	ATOM	261	CB	LYS	A	63	13.590	58.066	11.290	1.00	20.04	A
40	ATOM	262	CG	LYS	A	63	13.128	58.814	12.549	1.00	22.71	A
	ATOM	263	CD	LYS	A	63	11.608	58.979	12.573	1.00	25.03	A
	ATOM	264	CE	LYS	A	63	11.129	59.810	13.761	1.00	26.33	A
	ATOM	265	NZ	LYS	A	63	11.459	59.217	15.099	1.00	28.40	A
	ATOM	266	C	LYS	A	63	13.180	56.108	9.800	1.00	18.64	A
45	ATOM	267	O	LYS	A	63	12.175	56.225	9.090	1.00	18.80	A
	ATOM	268	N	GLN	A	64	14.302	55.557	9.358	1.00	17.70	A
	ATOM	269	CA	GLN	A	64	14.400	55.102	7.976	1.00	17.10	A
	ATOM	270	CB	GLN	A	64	15.610	55.768	7.320	1.00	16.66	A
	ATOM	271	CG	GLN	A	64	15.510	57.285	7.347	1.00	16.52	A
50	ATOM	272	CD	GLN	A	64	16.850	57.969	7.152	1.00	16.43	A
	ATOM	273	OE1	GLN	A	64	17.818	57.674	7.859	1.00	16.22	A
	ATOM	274	NE2	GLN	A	64	16.910	58.894	6.198	1.00	15.17	A
	ATOM	275	C	GLN	A	64	14.461	53.586	7.817	1.00	16.51	A
	ATOM	276	O	GLN	A	64	14.839	53.073	6.759	1.00	16.20	A
55	ATOM	277	N	GLY	A	65	14.070	52.880	8.873	1.00	16.63	A
	ATOM	278	CA	GLY	A	65	14.060	51.429	8.844	1.00	17.03	A
	ATOM	279	C	GLY	A	65	12.713	50.881	9.284	1.00	17.98	A
	ATOM	280	O	GLY	A	65	11.680	51.204	8.692	1.00	17.73	A
	ATOM	281	N	TRP	A	66	12.722	50.052	10.324	1.00	18.46	A

5	ATOM	282	CA	TRP	A	66	11.495	49.454	10.852	1.00	19.30	A
	ATOM	283	CB	TRP	A	66	11.101	48.231	10.012	1.00	18.93	A
	ATOM	284	CG	TRP	A	66	12.024	47.045	10.179	1.00	18.71	A
	ATOM	285	CD2	TRP	A	66	13.222	46.776	9.440	1.00	18.40	A
	ATOM	286	CE2	TRP	A	66	13.768	45.575	9.950	1.00	18.17	A
10	ATOM	287	CE3	TRP	A	66	13.890	47.435	8.396	1.00	18.28	A
	ATOM	288	CD1	TRP	A	66	11.897	46.026	11.081	1.00	18.40	A
	ATOM	289	NE1	TRP	A	66	12.938	45.139	10.949	1.00	18.80	A
	ATOM	290	CZ2	TRP	A	66	14.952	45.015	9.452	1.00	18.67	A
	ATOM	291	CZ3	TRP	A	66	15.067	46.881	7.901	1.00	18.13	A
15	ATOM	292	CH2	TRP	A	66	15.587	45.681	8.431	1.00	18.63	A
	ATOM	293	C	TRP	A	66	11.768	49.028	12.289	1.00	19.82	A
	ATOM	294	O	TRP	A	66	12.906	49.117	12.751	1.00	19.90	A
	ATOM	295	N	ASN	A	67	10.735	48.581	13.000	1.00	20.61	A
	ATOM	296	CA	ASN	A	67	10.916	48.133	14.380	1.00	21.14	A
20	ATOM	297	CB	ASN	A	67	9.580	48.089	15.132	1.00	22.87	A
	ATOM	298	CG	ASN	A	67	9.005	49.469	15.382	1.00	23.90	A
	ATOM	299	OD1	ASN	A	67	9.737	50.419	15.660	1.00	24.85	A
	ATOM	300	ND2	ASN	A	67	7.684	49.580	15.308	1.00	24.85	A
	ATOM	301	C	ASN	A	67	11.534	46.742	14.365	1.00	21.15	A
25	ATOM	302	O	ASN	A	67	10.859	45.751	14.076	1.00	20.49	A
	ATOM	303	N	ILE	A	68	12.822	46.669	14.680	1.00	20.89	A
	ATOM	304	CA	ILE	A	68	13.524	45.395	14.676	1.00	20.74	A
	ATOM	305	CB	ILE	A	68	15.047	45.602	14.791	1.00	20.37	A
	ATOM	306	CG2	ILE	A	68	15.754	44.256	14.762	1.00	20.22	A
30	ATOM	307	CG1	ILE	A	68	15.541	46.489	13.643	1.00	19.43	A
	ATOM	308	CD1	ILE	A	68	16.996	46.907	13.771	1.00	18.98	A
	ATOM	309	C	ILE	A	68	13.074	44.489	15.816	1.00	21.81	A
	ATOM	310	O	ILE	A	68	12.958	44.923	16.961	1.00	21.06	A
	ATOM	311	N	LYS	A	69	12.820	43.227	15.486	1.00	22.54	A
35	ATOM	312	CA	LYS	A	69	12.402	42.240	16.472	1.00	23.75	A
	ATOM	313	CB	LYS	A	69	10.990	41.731	16.154	1.00	25.70	A
	ATOM	314	CG	LYS	A	69	9.910	42.796	16.310	1.00	28.27	A
	ATOM	315	CD	LYS	A	69	8.529	42.293	15.899	1.00	30.99	A
	ATOM	316	CE	LYS	A	69	8.470	41.949	14.415	1.00	32.58	A
40	ATOM	317	NZ	LYS	A	69	7.069	41.696	13.953	1.00	33.89	A
	ATOM	318	C	LYS	A	69	13.399	41.087	16.440	1.00	23.31	A
	ATOM	319	O	LYS	A	69	13.965	40.779	15.394	1.00	22.08	A
	ATOM	320	N	TYR	A	70	13.627	40.463	17.590	1.00	22.98	A
	ATOM	321	CA	TYR	A	70	14.558	39.347	17.659	1.00	23.39	A
45	ATOM	322	CB	TYR	A	70	15.955	39.838	18.069	1.00	22.09	A
	ATOM	323	CG	TYR	A	70	16.033	40.441	19.454	1.00	21.39	A
	ATOM	324	CD1	TYR	A	70	16.250	39.641	20.577	1.00	21.26	A
	ATOM	325	CE1	TYR	A	70	16.301	40.193	21.854	1.00	21.28	A
	ATOM	326	CD2	TYR	A	70	15.870	41.810	19.646	1.00	20.94	A
50	ATOM	327	CE2	TYR	A	70	15.916	42.371	20.915	1.00	21.13	A
	ATOM	328	CZ	TYR	A	70	16.131	41.560	22.014	1.00	21.33	A
	ATOM	329	OH	TYR	A	70	16.160	42.120	23.270	1.00	21.29	A
	ATOM	330	C	TYR	A	70	14.067	38.291	18.639	1.00	24.36	A
	ATOM	331	O	TYR	A	70	13.299	38.587	19.556	1.00	24.37	A
55	ATOM	332	N	ASP	A	71	14.506	37.058	18.426	1.00	25.28	A
	ATOM	333	CA	ASP	A	71	14.134	35.952	19.295	1.00	26.59	A
	ATOM	334	CB	ASP	A	71	14.108	34.650	18.491	1.00	27.54	A
	ATOM	335	CG	ASP	A	71	13.865	33.430	19.358	1.00	28.68	A
	ATOM	336	OD1	ASP	A	71	13.325	33.583	20.474	1.00	29.32	A

	ATOM	337	OD2	ASP	A	71	14.208	32.315	18.913	1.00	29.61	A
	ATOM	338	C	ASP	A	71	15.166	35.878	20.414	1.00	27.11	A
	ATOM	339	O	ASP	A	71	16.324	35.542	20.181	1.00	27.07	A
5	ATOM	340	N	PRO	A	72	14.758	36.205	21.650	1.00	27.95	A
	ATOM	341	CD	PRO	A	72	13.382	36.467	22.102	1.00	28.09	A
	ATOM	342	CA	PRO	A	72	15.682	36.167	22.788	1.00	28.21	A
	ATOM	343	CB	PRO	A	72	14.777	36.487	23.981	1.00	28.36	A
	ATOM	344	CG	PRO	A	72	13.431	36.001	23.536	1.00	29.13	A
10	ATOM	345	C	PRO	A	72	16.430	34.848	22.949	1.00	28.47	A
	ATOM	346	O	PRO	A	72	17.544	34.819	23.478	1.00	28.39	A
	ATOM	347	N	LEU	A	73	15.831	33.761	22.476	1.00	28.12	A
	ATOM	348	CA	LEU	A	73	16.458	32.450	22.589	1.00	28.34	A
	ATOM	349	CB	LEU	A	73	15.396	31.350	22.521	1.00	28.75	A
15	ATOM	350	CG	LEU	A	73	14.394	31.348	23.678	1.00	29.26	A
	ATOM	351	CD1	LEU	A	73	13.386	30.228	23.480	1.00	29.98	A
	ATOM	352	CD2	LEU	A	73	15.137	31.176	24.999	1.00	30.07	A
	ATOM	353	C	LEU	A	73	17.526	32.200	21.530	1.00	28.03	A
	ATOM	354	O	LEU	A	73	18.172	31.155	21.531	1.00	27.41	A
20	ATOM	355	N	LYS	A	74	17.717	33.159	20.629	1.00	27.84	A
	ATOM	356	CA	LYS	A	74	18.719	33.010	19.580	1.00	28.11	A
	ATOM	357	CB	LYS	A	74	18.719	34.238	18.669	1.00	28.49	A
	ATOM	358	CG	LYS	A	74	19.670	34.132	17.489	1.00	29.82	A
	ATOM	359	CD	LYS	A	74	19.495	35.303	16.537	1.00	30.64	A
25	ATOM	360	CE	LYS	A	74	20.364	35.143	15.302	1.00	31.81	A
	ATOM	361	NZ	LYS	A	74	20.171	36.267	14.342	1.00	31.98	A
	ATOM	362	C	LYS	A	74	20.107	32.821	20.188	1.00	28.09	A
	ATOM	363	O	LYS	A	74	20.905	32.019	19.708	1.00	27.62	A
	ATOM	364	N	TYR	A	75	20.390	33.567	21.249	1.00	28.79	A
30	ATOM	365	CA	TYR	A	75	21.678	33.470	21.917	1.00	29.44	A
	ATOM	366	CB	TYR	A	75	22.267	34.870	22.135	1.00	30.25	A
	ATOM	367	CG	TYR	A	75	22.560	35.593	20.839	1.00	31.19	A
	ATOM	368	CD1	TYR	A	75	21.682	36.552	20.330	1.00	32.32	A
	ATOM	369	CE1	TYR	A	75	21.919	37.167	19.097	1.00	32.54	A
35	ATOM	370	CD2	TYR	A	75	23.685	35.268	20.085	1.00	31.91	A
	ATOM	371	CE2	TYR	A	75	23.929	35.871	18.854	1.00	33.09	A
	ATOM	372	CZ	TYR	A	75	23.043	36.816	18.365	1.00	33.06	A
	ATOM	373	OH	TYR	A	75	23.281	37.385	17.133	1.00	34.74	A
	ATOM	374	C	TYR	A	75	21.533	32.738	23.246	1.00	29.32	A
40	ATOM	375	O	TYR	A	75	20.536	32.903	23.947	1.00	28.56	A
	ATOM	376	N	ASN	A	76	22.524	31.914	23.573	1.00	29.65	A
	ATOM	377	CA	ASN	A	76	22.515	31.153	24.817	1.00	30.92	A
	ATOM	378	CB	ASN	A	76	21.679	29.879	24.663	1.00	31.88	A
	ATOM	379	CG	ASN	A	76	22.350	28.844	23.789	1.00	32.89	A
45	ATOM	380	OD1	ASN	A	76	22.597	29.077	22.610	1.00	34.45	A
	ATOM	381	ND2	ASN	A	76	22.652	27.686	24.368	1.00	35.12	A
	ATOM	382	C	ASN	A	76	23.940	30.786	25.217	1.00	31.31	A
	ATOM	383	O	ASN	A	76	24.898	31.163	24.544	1.00	31.17	A
	ATOM	384	N	ALA	A	77	24.071	30.042	26.311	1.00	31.88	A
50	ATOM	385	CA	ALA	A	77	25.377	29.634	26.820	1.00	32.55	A
	ATOM	386	CB	ALA	A	77	25.197	28.651	27.972	1.00	33.07	A
	ATOM	387	C	ALA	A	77	26.297	29.028	25.763	1.00	33.01	A
	ATOM	388	O	ALA	A	77	27.516	29.186	25.831	1.00	33.48	A
	ATOM	389	N	HIS	A	78	25.718	28.340	24.785	1.00	33.14	A
55	ATOM	390	CA	HIS	A	78	26.512	27.700	23.741	1.00	33.71	A
	ATOM	391	CB	HIS	A	78	25.869	26.367	23.349	1.00	35.33	A

5	ATOM	392	CG	HIS	A	78	25.613	25.459	24.511	1.00	37.19	A
	ATOM	393	CD2	HIS	A	78	24.467	24.910	24.978	1.00	37.95	A
	ATOM	394	ND1	HIS	A	78	26.616	25.029	25.354	1.00	38.44	A
	ATOM	395	CE1	HIS	A	78	26.098	24.255	26.291	1.00	39.01	A
	ATOM	396	NE2	HIS	A	78	24.796	24.166	26.085	1.00	38.98	A
	ATOM	397	C	HIS	A	78	26.689	28.570	22.501	1.00	32.69	A
	ATOM	398	O	HIS	A	78	27.445	28.221	21.594	1.00	32.79	A
	ATOM	399	N	HIS	A	79	25.997	29.703	22.471	1.00	31.30	A
	ATOM	400	CA	HIS	A	79	26.075	30.617	21.337	1.00	29.39	A
	ATOM	401	CB	HIS	A	79	25.026	30.220	20.294	1.00	29.56	A
	ATOM	402	CG	HIS	A	79	25.097	31.011	19.026	1.00	30.05	A
	ATOM	403	CD2	HIS	A	79	25.904	30.892	17.945	1.00	30.18	A
	ATOM	404	ND1	HIS	A	79	24.269	32.083	18.769	1.00	30.14	A
	ATOM	405	CE1	HIS	A	79	24.564	32.590	17.585	1.00	30.18	A
	ATOM	406	NE2	HIS	A	79	25.552	31.886	17.064	1.00	29.64	A
	ATOM	407	C	HIS	A	79	25.848	32.049	21.821	1.00	27.72	A
	ATOM	408	O	HIS	A	79	24.724	32.546	21.818	1.00	27.38	A
	ATOM	409	N	LYS	A	80	26.929	32.701	22.239	1.00	25.74	A
	ATOM	410	CA	LYS	A	80	26.864	34.067	22.751	1.00	24.30	A
	ATOM	411	CB	LYS	A	80	27.894	34.265	23.864	1.00	25.55	A
10	ATOM	412	CG	LYS	A	80	27.771	33.315	25.047	1.00	27.24	A
	ATOM	413	CD	LYS	A	80	28.848	33.636	26.074	1.00	28.76	A
	ATOM	414	CE	LYS	A	80	28.801	32.686	27.260	1.00	30.53	A
	ATOM	415	NZ	LYS	A	80	29.897	32.984	28.235	1.00	31.64	A
	ATOM	416	C	LYS	A	80	27.117	35.130	21.687	1.00	23.05	A
15	ATOM	417	O	LYS	A	80	27.735	34.861	20.655	1.00	21.91	A
	ATOM	418	N	LEU	A	81	26.634	36.340	21.961	1.00	20.81	A
	ATOM	419	CA	LEU	A	81	26.826	37.476	21.069	1.00	19.46	A
	ATOM	420	CB	LEU	A	81	25.639	38.444	21.163	1.00	18.84	A
	ATOM	421	CG	LEU	A	81	25.719	39.706	20.294	1.00	18.97	A
20	ATOM	422	CD1	LEU	A	81	25.692	39.316	18.819	1.00	18.21	A
	ATOM	423	CD2	LEU	A	81	24.558	40.637	20.616	1.00	18.43	A
	ATOM	424	C	LEU	A	81	28.097	38.179	21.532	1.00	19.09	A
	ATOM	425	O	LEU	A	81	28.168	38.669	22.660	1.00	18.47	A
	ATOM	426	N	LYS	A	82	29.108	38.198	20.670	1.00	18.24	A
25	ATOM	427	CA	LYS	A	82	30.379	38.844	20.984	1.00	18.10	A
	ATOM	428	CB	LYS	A	82	31.523	38.130	20.258	1.00	20.34	A
	ATOM	429	CG	LYS	A	82	31.736	36.693	20.723	1.00	23.59	A
	ATOM	430	CD	LYS	A	82	32.626	35.899	19.769	1.00	26.71	A
	ATOM	431	CE	LYS	A	82	34.047	36.436	19.723	1.00	28.41	A
30	ATOM	432	NZ	LYS	A	82	34.880	35.658	18.761	1.00	31.12	A
	ATOM	433	C	LYS	A	82	30.283	40.289	20.517	1.00	17.55	A
	ATOM	434	O	LYS	A	82	30.112	40.550	19.327	1.00	16.98	A
	ATOM	435	N	VAL	A	83	30.392	41.226	21.454	1.00	15.95	A
	ATOM	436	CA	VAL	A	83	30.285	42.638	21.119	1.00	15.21	A
35	ATOM	437	CB	VAL	A	83	29.253	43.349	22.035	1.00	14.49	A
	ATOM	438	CG1	VAL	A	83	29.126	44.814	21.648	1.00	13.69	A
	ATOM	439	CG2	VAL	A	83	27.895	42.658	21.926	1.00	15.01	A
	ATOM	440	C	VAL	A	83	31.615	43.375	21.229	1.00	15.13	A
	ATOM	441	O	VAL	A	83	32.297	43.302	22.252	1.00	15.11	A
40	ATOM	442	N	PHE	A	84	31.976	44.084	20.163	1.00	15.08	A
	ATOM	443	CA	PHE	A	84	33.207	44.868	20.142	1.00	14.60	A
	ATOM	444	CB	PHE	A	84	34.081	44.489	18.944	1.00	15.76	A
	ATOM	445	CG	PHE	A	84	34.765	43.163	19.085	1.00	17.05	A
	ATOM	446	CD1	PHE	A	84	34.321	42.055	18.371	1.00	17.71	A

5	ATOM	447	CD2	PHE	A	84	35.859	43.021	19.935	1.00	18.34	A
	ATOM	448	CE1	PHE	A	84	34.961	40.819	18.500	1.00	18.55	A
	ATOM	449	CE2	PHE	A	84	36.507	41.795	20.073	1.00	18.71	A
	ATOM	450	CZ	PHE	A	84	36.058	40.690	19.354	1.00	19.03	A
	ATOM	451	C	PHE	A	84	32.876	46.355	20.061	1.00	14.25	A
10	ATOM	452	O	PHE	A	84	32.342	46.819	19.054	1.00	14.04	A
	ATOM	453	N	VAL	A	85	33.183	47.085	21.130	1.00	13.03	A
	ATOM	454	CA	VAL	A	85	32.955	48.527	21.193	1.00	13.03	A
	ATOM	455	CB	VAL	A	85	32.596	48.976	22.629	1.00	12.58	A
	ATOM	456	CG1	VAL	A	85	32.408	50.493	22.680	1.00	13.25	A
15	ATOM	457	CG2	VAL	A	85	31.318	48.272	23.072	1.00	13.56	A
	ATOM	458	C	VAL	A	85	34.267	49.165	20.762	1.00	11.93	A
	ATOM	459	O	VAL	A	85	35.280	49.049	21.451	1.00	12.19	A
	ATOM	460	N	VAL	A	86	34.240	49.840	19.618	1.00	11.92	A
	ATOM	461	CA	VAL	A	86	35.442	50.442	19.058	1.00	11.60	A
20	ATOM	462	CB	VAL	A	86	35.580	50.032	17.571	1.00	12.47	A
	ATOM	463	CG1	VAL	A	86	36.907	50.523	17.002	1.00	11.40	A
	ATOM	464	CG2	VAL	A	86	35.458	48.511	17.442	1.00	13.05	A
	ATOM	465	C	VAL	A	86	35.508	51.967	19.168	1.00	11.18	A
	ATOM	466	O	VAL	A	86	34.875	52.683	18.393	1.00	10.78	A
25	ATOM	467	N	PRO	A	87	36.292	52.478	20.133	1.00	10.83	A
	ATOM	468	CD	PRO	A	87	37.015	51.722	21.169	1.00	10.63	A
	ATOM	469	CA	PRO	A	87	36.448	53.923	20.344	1.00	10.81	A
	ATOM	470	CB	PRO	A	87	37.307	54.000	21.610	1.00	10.48	A
	ATOM	471	CG	PRO	A	87	37.008	52.695	22.311	1.00	10.82	A
30	ATOM	472	C	PRO	A	87	37.145	54.569	19.146	1.00	10.84	A
	ATOM	473	O	PRO	A	87	38.123	54.023	18.624	1.00	10.85	A
	ATOM	474	N	HIS	A	88	36.646	55.725	18.714	1.00	10.80	A
	ATOM	475	CA	HIS	A	88	37.235	56.427	17.577	1.00	11.53	A
	ATOM	476	CB	HIS	A	88	36.662	55.885	16.257	1.00	10.95	A
35	ATOM	477	CG	HIS	A	88	35.211	56.191	16.051	1.00	11.87	A
	ATOM	478	CD2	HIS	A	88	34.098	55.515	16.420	1.00	11.54	A
	ATOM	479	ND1	HIS	A	88	34.773	57.323	15.397	1.00	10.84	A
	ATOM	480	CE1	HIS	A	88	33.453	57.330	15.371	1.00	11.92	A
	ATOM	481	NE2	HIS	A	88	33.018	56.244	15.986	1.00	11.27	A
40	ATOM	482	C	HIS	A	88	37.015	57.933	17.666	1.00	12.18	A
	ATOM	483	O	HIS	A	88	36.203	58.417	18.459	1.00	11.77	A
	ATOM	484	N	SER	A	89	37.753	58.670	16.845	1.00	11.89	A
	ATOM	485	CA	SER	A	89	37.671	60.122	16.833	1.00	11.62	A
	ATOM	486	CB	SER	A	89	38.775	60.702	17.728	1.00	10.98	A
45	ATOM	487	OG	SER	A	89	38.737	62.117	17.764	1.00	11.39	A
	ATOM	488	C	SER	A	89	37.852	60.577	15.393	1.00	11.91	A
	ATOM	489	O	SER	A	89	38.928	60.417	14.815	1.00	12.41	A
	ATOM	490	N	HIS	A	90	36.792	61.130	14.814	1.00	11.46	A
	ATOM	491	CA	HIS	A	90	36.835	61.592	13.432	1.00	11.67	A
50	ATOM	492	CB	HIS	A	90	35.415	61.640	12.859	1.00	10.52	A
	ATOM	493	CG	HIS	A	90	35.368	61.922	11.391	1.00	10.05	A
	ATOM	494	CD2	HIS	A	90	34.794	62.930	10.695	1.00	9.72	A
	ATOM	495	ND1	HIS	A	90	35.986	61.116	10.460	1.00	10.72	A
	ATOM	496	CE1	HIS	A	90	35.795	61.615	9.253	1.00	10.25	A
55	ATOM	497	NE2	HIS	A	90	35.074	62.716	9.368	1.00	9.97	A
	ATOM	498	C	HIS	A	90	37.491	62.969	13.355	1.00	11.84	A
	ATOM	499	O	HIS	A	90	36.912	63.971	13.787	1.00	11.75	A
	ATOM	500	N	ASN	A	91	38.704	63.005	12.809	1.00	11.84	A
	ATOM	501	CA	ASN	A	91	39.466	64.243	12.680	1.00	12.03	A

5	ATOM	502	CB	ASN	A	91	40.857	64.082	13.304	1.00	12.04	A
	ATOM	503	CG	ASN	A	91	40.812	63.945	14.810	1.00	12.39	A
	ATOM	504	OD1	ASN	A	91	40.213	63.011	15.348	1.00	14.18	A
	ATOM	505	ND2	ASN	A	91	41.451	64.877	15.503	1.00	10.68	A
	ATOM	506	C	ASN	A	91	39.628	64.671	11.226	1.00	12.39	A
10	ATOM	507	O	ASN	A	91	40.322	64.014	10.450	1.00	12.84	A
	ATOM	508	N	ASP	A	92	38.996	65.783	10.873	1.00	11.57	A
	ATOM	509	CA	ASP	A	92	39.063	66.308	9.517	1.00	12.43	A
	ATOM	510	CB	ASP	A	92	37.827	67.155	9.224	1.00	11.83	A
	ATOM	511	CG	ASP	A	92	36.555	66.377	9.378	1.00	12.30	A
15	ATOM	512	OD1	ASP	A	92	36.335	65.462	8.565	1.00	12.29	A
	ATOM	513	OD2	ASP	A	92	35.791	66.671	10.319	1.00	13.77	A
	ATOM	514	C	ASP	A	92	40.293	67.168	9.282	1.00	12.14	A
	ATOM	515	O	ASP	A	92	40.522	68.136	10.005	1.00	12.62	A
	ATOM	516	N	PRO	A	93	41.115	66.810	8.284	1.00	12.65	A
20	ATOM	517	CD	PRO	A	93	41.195	65.488	7.637	1.00	12.43	A
	ATOM	518	CA	PRO	A	93	42.311	67.603	7.988	1.00	12.86	A
	ATOM	519	CB	PRO	A	93	43.108	66.697	7.052	1.00	12.57	A
	ATOM	520	CG	PRO	A	93	42.686	65.311	7.478	1.00	13.74	A
	ATOM	521	C	PRO	A	93	41.823	68.876	7.290	1.00	13.17	A
25	ATOM	522	O	PRO	A	93	42.157	69.139	6.132	1.00	13.70	A
	ATOM	523	N	GLY	A	94	41.008	69.641	8.010	1.00	12.62	A
	ATOM	524	CA	GLY	A	94	40.446	70.868	7.481	1.00	11.94	A
	ATOM	525	C	GLY	A	94	38.965	70.725	7.160	1.00	12.22	A
	ATOM	526	O	GLY	A	94	38.530	69.697	6.636	1.00	10.48	A
30	ATOM	527	N	TRP	A	95	38.191	71.751	7.506	1.00	12.07	A
	ATOM	528	CA	TRP	A	95	36.755	71.808	7.232	1.00	13.08	A
	ATOM	529	CB	TRP	A	95	35.964	70.737	7.996	1.00	12.61	A
	ATOM	530	CG	TRP	A	95	34.480	70.807	7.674	1.00	12.37	A
	ATOM	531	CD2	TRP	A	95	33.381	70.521	8.556	1.00	12.36	A
35	ATOM	532	CE2	TRP	A	95	32.191	70.701	7.812	1.00	11.92	A
	ATOM	533	CE3	TRP	A	95	33.285	70.128	9.900	1.00	12.35	A
	ATOM	534	CD1	TRP	A	95	33.923	71.138	6.469	1.00	12.10	A
	ATOM	535	NE1	TRP	A	95	32.551	71.079	6.545	1.00	12.46	A
	ATOM	536	CZ2	TRP	A	95	30.919	70.501	8.366	1.00	12.42	A
40	ATOM	537	CZ3	TRP	A	95	32.015	69.928	10.453	1.00	12.35	A
	ATOM	538	CH2	TRP	A	95	30.853	70.116	9.684	1.00	12.53	A
	ATOM	539	C	TRP	A	95	36.241	73.191	7.623	1.00	13.99	A
	ATOM	540	O	TRP	A	95	36.115	74.066	6.770	1.00	13.09	A
	ATOM	541	N	ILE	A	96	35.938	73.385	8.906	1.00	15.45	A
45	ATOM	542	CA	ILE	A	96	35.475	74.693	9.365	1.00	16.71	A
	ATOM	543	CB	ILE	A	96	34.333	74.581	10.399	1.00	18.64	A
	ATOM	544	CG2	ILE	A	96	33.083	74.028	9.719	1.00	18.36	A
	ATOM	545	CG1	ILE	A	96	34.760	73.709	11.576	1.00	20.42	A
	ATOM	546	CD1	ILE	A	96	33.740	73.664	12.692	1.00	23.56	A
50	ATOM	547	C	ILE	A	96	36.658	75.456	9.955	1.00	16.73	A
	ATOM	548	O	ILE	A	96	36.567	76.644	10.261	1.00	16.70	A
	ATOM	549	N	GLN	A	97	37.768	74.741	10.107	1.00	16.15	A
	ATOM	550	CA	GLN	A	97	39.028	75.295	10.585	1.00	16.16	A
	ATOM	551	CB	GLN	A	97	39.325	74.865	12.027	1.00	18.11	A
55	ATOM	552	CG	GLN	A	97	38.431	75.503	13.087	1.00	22.05	A
	ATOM	553	CD	GLN	A	97	38.907	75.206	14.504	1.00	25.07	A
	ATOM	554	OE1	GLN	A	97	40.041	75.525	14.872	1.00	27.71	A
	ATOM	555	NE2	GLN	A	97	38.041	74.592	15.306	1.00	27.57	A
	ATOM	556	C	GLN	A	97	40.069	74.685	9.649	1.00	14.57	A

5	ATOM	557	O	GLN	A	97	39.795	73.683	8.988	1.00	13.77	A
	ATOM	558	N	THR	A	98	41.249	75.283	9.574	1.00	13.40	A
	ATOM	559	CA	THR	A	98	42.293	74.742	8.713	1.00	12.50	A
	ATOM	560	CB	THR	A	98	43.402	75.763	8.456	1.00	12.05	A
	ATOM	561	OG1	THR	A	98	44.038	76.073	9.700	1.00	13.52	A
	ATOM	562	CG2	THR	A	98	42.841	77.040	7.836	1.00	11.40	A
	ATOM	563	C	THR	A	98	42.942	73.551	9.411	1.00	12.44	A
10	ATOM	564	O	THR	A	98	42.713	73.312	10.601	1.00	12.49	A
	ATOM	565	N	PHE	A	99	43.754	72.810	8.666	1.00	11.73	A
	ATOM	566	CA	PHE	A	99	44.462	71.665	9.221	1.00	12.23	A
	ATOM	567	CB	PHE	A	99	45.472	71.120	8.204	1.00	11.49	A
	ATOM	568	CG	PHE	A	99	46.350	70.017	8.745	1.00	12.06	A
15	ATOM	569	CD1	PHE	A	99	45.941	68.687	8.686	1.00	11.94	A
	ATOM	570	CD2	PHE	A	99	47.589	70.312	9.314	1.00	11.54	A
	ATOM	571	CE1	PHE	A	99	46.752	67.663	9.182	1.00	12.73	A
	ATOM	572	CE2	PHE	A	99	48.408	69.298	9.814	1.00	12.59	A
	ATOM	573	CZ	PHE	A	99	47.988	67.968	9.747	1.00	12.47	A
20	ATOM	574	C	PHE	A	99	45.211	72.088	10.486	1.00	12.42	A
	ATOM	575	O	PHE	A	99	45.055	71.479	11.540	1.00	12.95	A
	ATOM	576	N	GLU	A	100	46.026	73.134	10.370	1.00	13.15	A
	ATOM	577	CA	GLU	A	100	46.818	73.617	11.502	1.00	14.12	A
	ATOM	578	CB	GLU	A	100	47.789	74.708	11.034	1.00	14.54	A
	ATOM	579	CG	GLU	A	100	48.842	75.113	12.062	1.00	15.92	A
	ATOM	580	CD	GLU	A	100	49.753	73.965	12.474	1.00	17.24	A
25	ATOM	581	OE1	GLU	A	100	49.923	73.012	11.680	1.00	16.33	A
	ATOM	582	OE2	GLU	A	100	50.316	74.028	13.591	1.00	18.05	A
	ATOM	583	C	GLU	A	100	45.973	74.135	12.666	1.00	14.27	A
	ATOM	584	O	GLU	A	100	46.330	73.936	13.827	1.00	14.15	A
	ATOM	585	N	GLU	A	101	44.860	74.798	12.364	1.00	14.44	A
30	ATOM	586	CA	GLU	A	101	43.989	75.313	13.420	1.00	14.32	A
	ATOM	587	CB	GLU	A	101	42.850	76.150	12.823	1.00	15.58	A
	ATOM	588	CG	GLU	A	101	43.314	77.445	12.156	1.00	16.71	A
	ATOM	589	CD	GLU	A	101	42.163	78.275	11.601	1.00	17.74	A
	ATOM	590	OE1	GLU	A	101	41.227	77.690	11.020	1.00	16.12	A
35	ATOM	591	OE2	GLU	A	101	42.205	79.518	11.736	1.00	18.27	A
	ATOM	592	C	GLU	A	101	43.416	74.144	14.224	1.00	14.11	A
	ATOM	593	O	GLU	A	101	43.411	74.169	15.456	1.00	13.45	A
	ATOM	594	N	TYR	A	102	42.930	73.120	13.526	1.00	13.09	A
	ATOM	595	CA	TYR	A	102	42.385	71.947	14.205	1.00	13.59	A
40	ATOM	596	CB	TYR	A	102	41.819	70.934	13.210	1.00	13.65	A
	ATOM	597	CG	TYR	A	102	40.407	71.173	12.737	1.00	13.71	A
	ATOM	598	CD1	TYR	A	102	39.354	71.343	13.641	1.00	14.39	A
	ATOM	599	CE1	TYR	A	102	38.030	71.454	13.190	1.00	14.14	A
	ATOM	600	CD2	TYR	A	102	40.106	71.131	11.376	1.00	13.81	A
45	ATOM	601	CE2	TYR	A	102	38.806	71.240	10.921	1.00	13.84	A
	ATOM	602	CZ	TYR	A	102	37.771	71.399	11.826	1.00	13.69	A
	ATOM	603	OH	TYR	A	102	36.487	71.490	11.343	1.00	13.18	A
	ATOM	604	C	TYR	A	102	43.482	71.247	14.999	1.00	13.51	A
	ATOM	605	O	TYR	A	102	43.258	70.795	16.123	1.00	12.77	A
50	ATOM	606	N	TYR	A	103	44.663	71.136	14.402	1.00	13.52	A
	ATOM	607	CA	TYR	A	103	45.763	70.471	15.081	1.00	14.48	A
	ATOM	608	CB	TYR	A	103	47.024	70.464	14.217	1.00	13.22	A
	ATOM	609	CG	TYR	A	103	48.189	69.805	14.918	1.00	13.75	A
	ATOM	610	CD1	TYR	A	103	48.191	68.431	15.163	1.00	13.55	A
55	ATOM	611	CE1	TYR	A	103	49.230	67.827	15.867	1.00	13.28	A

5	ATOM	612	CD2	TYR	A	103	49.262	70.561	15.394	1.00	14.16	A
	ATOM	613	CE2	TYR	A	103	50.304	69.967	16.101	1.00	14.10	A
	ATOM	614	CZ	TYR	A	103	50.281	68.601	16.335	1.00	14.07	A
	ATOM	615	OH	TYR	A	103	51.301	68.009	17.045	1.00	14.60	A
	ATOM	616	C	TYR	A	103	46.083	71.148	16.407	1.00	15.20	A
10	ATOM	617	O	TYR	A	103	46.206	70.489	17.438	1.00	15.39	A
	ATOM	618	N	GLN	A	104	46.214	72.468	16.372	1.00	15.88	A
	ATOM	619	CA	GLN	A	104	46.546	73.233	17.568	1.00	16.71	A
	ATOM	620	CB	GLN	A	104	46.905	74.676	17.189	1.00	17.21	A
	ATOM	621	CG	GLN	A	104	48.221	74.831	16.436	1.00	16.37	A
15	ATOM	622	CD	GLN	A	104	49.408	74.295	17.221	1.00	17.63	A
	ATOM	623	OE1	GLN	A	104	49.456	74.404	18.449	1.00	17.43	A
	ATOM	624	NE2	GLN	A	104	50.378	73.722	16.514	1.00	16.09	A
	ATOM	625	C	GLN	A	104	45.438	73.259	18.610	1.00	17.34	A
	ATOM	626	O	GLN	A	104	45.702	73.153	19.805	1.00	17.27	A
20	ATOM	627	N	HIS	A	105	44.197	73.392	18.157	1.00	17.76	A
	ATOM	628	CA	HIS	A	105	43.063	73.479	19.068	1.00	18.88	A
	ATOM	629	CB	HIS	A	105	41.928	74.271	18.408	1.00	21.57	A
	ATOM	630	CG	HIS	A	105	42.350	75.595	17.851	1.00	24.72	A
	ATOM	631	CD2	HIS	A	105	43.543	76.237	17.874	1.00	26.28	A
25	ATOM	632	ND1	HIS	A	105	41.486	76.419	17.161	1.00	26.75	A
	ATOM	633	CE1	HIS	A	105	42.129	77.510	16.783	1.00	27.01	A
	ATOM	634	NE2	HIS	A	105	43.378	77.424	17.203	1.00	27.01	A
	ATOM	635	C	HIS	A	105	42.492	72.154	19.563	1.00	18.41	A
	ATOM	636	O	HIS	A	105	42.010	72.076	20.692	1.00	18.04	A
30	ATOM	637	N	ASP	A	106	42.552	71.114	18.733	1.00	16.87	A
	ATOM	638	CA	ASP	A	106	41.956	69.835	19.108	1.00	16.42	A
	ATOM	639	CB	ASP	A	106	40.668	69.634	18.301	1.00	16.96	A
	ATOM	640	CG	ASP	A	106	39.650	70.730	18.541	1.00	18.76	A
	ATOM	641	OD1	ASP	A	106	38.962	70.684	19.579	1.00	19.47	A
35	ATOM	642	OD2	ASP	A	106	39.547	71.644	17.694	1.00	19.48	A
	ATOM	643	C	ASP	A	106	42.792	68.567	18.978	1.00	15.43	A
	ATOM	644	O	ASP	A	106	43.061	67.885	19.965	1.00	15.33	A
	ATOM	645	N	THR	A	107	43.192	68.251	17.752	1.00	14.43	A
	ATOM	646	CA	THR	A	107	43.931	67.027	17.470	1.00	13.03	A
40	ATOM	647	CB	THR	A	107	44.290	66.949	15.982	1.00	13.11	A
	ATOM	648	OG1	THR	A	107	43.104	67.149	15.203	1.00	11.86	A
	ATOM	649	CG2	THR	A	107	44.876	65.574	15.648	1.00	12.11	A
	ATOM	650	C	THR	A	107	45.182	66.709	18.287	1.00	13.20	A
	ATOM	651	O	THR	A	107	45.365	65.565	18.704	1.00	12.11	A
45	ATOM	652	N	LYS	A	108	46.053	67.685	18.515	1.00	12.87	A
	ATOM	653	CA	LYS	A	108	47.254	67.364	19.280	1.00	13.87	A
	ATOM	654	CB	LYS	A	108	48.252	68.534	19.277	1.00	14.10	A
	ATOM	655	CG	LYS	A	108	47.860	69.751	20.090	1.00	15.29	A
	ATOM	656	CD	LYS	A	108	48.944	70.823	19.971	1.00	15.77	A
50	ATOM	657	CE	LYS	A	108	48.719	71.975	20.937	1.00	16.23	A
	ATOM	658	NZ	LYS	A	108	49.829	72.973	20.871	1.00	16.57	A
	ATOM	659	C	LYS	A	108	46.891	66.964	20.706	1.00	13.55	A
	ATOM	660	O	LYS	A	108	47.588	66.169	21.330	1.00	13.59	A
	ATOM	661	N	HIS	A	109	45.790	67.505	21.213	1.00	14.16	A
55	ATOM	662	CA	HIS	A	109	45.343	67.179	22.565	1.00	14.77	A
	ATOM	663	CB	HIS	A	109	44.353	68.232	23.050	1.00	16.40	A
	ATOM	664	CG	HIS	A	109	44.924	69.614	23.077	1.00	18.18	A
	ATOM	665	CD2	HIS	A	109	44.655	70.706	22.324	1.00	18.81	A
	ATOM	666	ND1	HIS	A	109	45.937	69.981	23.939	1.00	19.58	A

	ATOM	667	CE1	HIS	A	109	46.266	71.241	23.714	1.00	19.97	A
	ATOM	668	NE2	HIS	A	109	45.503	71.703	22.739	1.00	20.15	A
	ATOM	669	C	HIS	A	109	44.699	65.797	22.571	1.00	14.18	A
5	ATOM	670	O	HIS	A	109	44.864	65.024	23.515	1.00	13.72	A
	ATOM	671	N	ILE	A	110	43.967	65.492	21.506	1.00	13.63	A
	ATOM	672	CA	ILE	A	110	43.319	64.195	21.376	1.00	12.97	A
	ATOM	673	CB	ILE	A	110	42.494	64.121	20.072	1.00	13.70	A
	ATOM	674	CG2	ILE	A	110	42.039	62.686	19.822	1.00	13.17	A
10	ATOM	675	CG1	ILE	A	110	41.309	65.091	20.158	1.00	13.46	A
	ATOM	676	CD1	ILE	A	110	40.505	65.217	18.870	1.00	13.46	A
	ATOM	677	C	ILE	A	110	44.378	63.096	21.355	1.00	13.01	A
	ATOM	678	O	ILE	A	110	44.259	62.088	22.053	1.00	12.30	A
	ATOM	679	N	LEU	A	111	45.419	63.295	20.557	1.00	12.48	A
15	ATOM	680	CA	LEU	A	111	46.479	62.303	20.455	1.00	13.22	A
	ATOM	681	CB	LEU	A	111	47.348	62.584	19.222	1.00	13.48	A
	ATOM	682	CG	LEU	A	111	46.624	62.258	17.910	1.00	13.21	A
	ATOM	683	CD1	LEU	A	111	47.448	62.722	16.714	1.00	12.52	A
	ATOM	684	CD2	LEU	A	111	46.359	60.755	17.848	1.00	13.63	A
20	ATOM	685	C	LEU	A	111	47.338	62.239	21.709	1.00	13.73	A
	ATOM	686	O	LEU	A	111	47.777	61.158	22.113	1.00	14.06	A
	ATOM	687	N	SER	A	112	47.573	63.388	22.332	1.00	14.19	A
	ATOM	688	CA	SER	A	112	48.381	63.412	23.545	1.00	14.98	A
	ATOM	689	CB	SER	A	112	48.673	64.852	23.965	1.00	15.68	A
25	ATOM	690	OG	SER	A	112	49.509	64.869	25.110	1.00	19.16	A
	ATOM	691	C	SER	A	112	47.665	62.675	24.676	1.00	15.17	A
	ATOM	692	O	SER	A	112	48.271	61.878	25.397	1.00	14.77	A
	ATOM	693	N	ASN	A	113	46.371	62.935	24.833	1.00	14.95	A
	ATOM	694	CA	ASN	A	113	45.623	62.269	25.887	1.00	15.42	A
30	ATOM	695	CB	ASN	A	113	44.348	63.055	26.202	1.00	16.09	A
	ATOM	696	CG	ASN	A	113	44.661	64.407	26.829	1.00	17.13	A
	ATOM	697	OD1	ASN	A	113	45.649	64.541	27.547	1.00	19.22	A
	ATOM	698	ND2	ASN	A	113	43.832	65.404	26.566	1.00	16.69	A
	ATOM	699	C	ASN	A	113	45.331	60.805	25.554	1.00	15.52	A
35	ATOM	700	O	ASN	A	113	45.154	59.983	26.455	1.00	14.44	A
	ATOM	701	N	ALA	A	114	45.306	60.470	24.265	1.00	15.03	A
	ATOM	702	CA	ALA	A	114	45.081	59.082	23.865	1.00	15.59	A
	ATOM	703	CB	ALA	A	114	44.906	58.977	22.348	1.00	15.62	A
	ATOM	704	C	ALA	A	114	46.296	58.272	24.308	1.00	15.90	A
40	ATOM	705	O	ALA	A	114	46.160	57.181	24.862	1.00	15.90	A
	ATOM	706	N	LEU	A	115	47.487	58.814	24.061	1.00	15.81	A
	ATOM	707	CA	LEU	A	115	48.725	58.142	24.443	1.00	16.69	A
	ATOM	708	CB	LEU	A	115	49.942	58.992	24.044	1.00	17.24	A
	ATOM	709	CG	LEU	A	115	51.322	58.478	24.479	1.00	17.48	A
45	ATOM	710	CD1	LEU	A	115	51.533	57.062	23.962	1.00	17.85	A
	ATOM	711	CD2	LEU	A	115	52.412	59.402	23.963	1.00	17.89	A
	ATOM	712	C	LEU	A	115	48.742	57.892	25.952	1.00	17.69	A
	ATOM	713	O	LEU	A	115	49.020	56.780	26.407	1.00	16.58	A
	ATOM	714	N	ARG	A	116	48.426	58.927	26.720	1.00	18.38	A
50	ATOM	715	CA	ARG	A	116	48.416	58.816	28.173	1.00	20.26	A
	ATOM	716	CB	ARG	A	116	48.148	60.188	28.795	1.00	23.40	A
	ATOM	717	CG	ARG	A	116	49.265	61.185	28.545	1.00	28.54	A
	ATOM	718	CD	ARG	A	116	48.916	62.579	29.037	1.00	32.84	A
	ATOM	719	NE	ARG	A	116	50.016	63.516	28.816	1.00	36.19	A
	ATOM	720	CZ	ARG	A	116	49.955	64.819	29.078	1.00	38.16	A
55	ATOM	721	NH1	ARG	A	116	48.842	65.347	29.572	1.00	39.38	A

5	ATOM	722	NH2	ARG	A	116	51.009	65.594	28.851	1.00	39.35	A
	ATOM	723	C	ARG	A	116	47.386	57.811	28.674	1.00	19.24	A
	ATOM	724	O	ARG	A	116	47.713	56.895	29.433	1.00	18.59	A
	ATOM	725	N	HIS	A	117	46.142	57.974	28.240	1.00	18.94	A
	ATOM	726	CA	HIS	A	117	45.076	57.087	28.673	1.00	19.08	A
10	ATOM	727	CB	HIS	A	117	43.731	57.653	28.237	1.00	20.04	A
	ATOM	728	CG	HIS	A	117	43.239	58.738	29.140	1.00	22.31	A
	ATOM	729	CD2	HIS	A	117	43.367	60.084	29.070	1.00	23.10	A
	ATOM	730	ND1	HIS	A	117	42.627	58.474	30.347	1.00	22.39	A
	ATOM	731	CE1	HIS	A	117	42.403	59.610	30.984	1.00	23.51	A
15	ATOM	732	NE2	HIS	A	117	42.844	60.603	30.231	1.00	23.78	A
	ATOM	733	C	HIS	A	117	45.208	55.630	28.267	1.00	18.21	A
	ATOM	734	O	HIS	A	117	44.894	54.747	29.060	1.00	17.60	A
	ATOM	735	N	LEU	A	118	45.667	55.367	27.047	1.00	17.82	A
	ATOM	736	CA	LEU	A	118	45.841	53.986	26.608	1.00	17.73	A
20	ATOM	737	CB	LEU	A	118	46.097	53.924	25.097	1.00	17.32	A
	ATOM	738	CG	LEU	A	118	44.910	54.378	24.234	1.00	17.44	A
	ATOM	739	CD1	LEU	A	118	45.295	54.362	22.762	1.00	17.28	A
	ATOM	740	CD2	LEU	A	118	43.719	53.466	24.485	1.00	17.73	A
	ATOM	741	C	LEU	A	118	47.014	53.375	27.368	1.00	18.47	A
25	ATOM	742	O	LEU	A	118	46.991	52.201	27.739	1.00	19.15	A
	ATOM	743	N	HIS	A	119	48.049	54.176	27.594	1.00	18.56	A
	ATOM	744	CA	HIS	A	119	49.212	53.702	28.324	1.00	19.21	A
	ATOM	745	CB	HIS	A	119	50.264	54.817	28.413	1.00	20.87	A
	ATOM	746	CG	HIS	A	119	51.429	54.483	29.292	1.00	23.01	A
30	ATOM	747	CD2	HIS	A	119	52.607	53.873	29.019	1.00	24.14	A
	ATOM	748	ND1	HIS	A	119	51.442	54.752	30.644	1.00	24.46	A
	ATOM	749	CE1	HIS	A	119	52.578	54.323	31.166	1.00	24.96	A
	ATOM	750	NE2	HIS	A	119	53.303	53.785	30.201	1.00	24.88	A
	ATOM	751	C	HIS	A	119	48.795	53.248	29.725	1.00	19.46	A
35	ATOM	752	O	HIS	A	119	49.180	52.169	30.175	1.00	19.45	A
	ATOM	753	N	ASP	A	120	47.981	54.063	30.392	1.00	18.91	A
	ATOM	754	CA	ASP	A	120	47.524	53.772	31.751	1.00	19.04	A
	ATOM	755	CB	ASP	A	120	47.142	55.071	32.464	1.00	18.77	A
	ATOM	756	CG	ASP	A	120	48.325	55.994	32.666	1.00	19.47	A
40	ATOM	757	OD1	ASP	A	120	49.473	55.504	32.675	1.00	18.88	A
	ATOM	758	OD2	ASP	A	120	48.102	57.212	32.830	1.00	21.58	A
	ATOM	759	C	ASP	A	120	46.366	52.783	31.899	1.00	19.15	A
	ATOM	760	O	ASP	A	120	46.121	52.286	32.998	1.00	18.84	A
	ATOM	761	N	ASN	A	121	45.655	52.504	30.809	1.00	18.84	A
45	ATOM	762	CA	ASN	A	121	44.523	51.576	30.850	1.00	19.16	A
	ATOM	763	CB	ASN	A	121	43.209	52.344	30.659	1.00	18.77	A
	ATOM	764	CG	ASN	A	121	43.000	53.421	31.719	1.00	19.68	A
	ATOM	765	OD1	ASN	A	121	43.437	54.567	31.560	1.00	19.47	A
	ATOM	766	ND2	ASN	A	121	42.343	53.052	32.812	1.00	17.58	A
50	ATOM	767	C	ASN	A	121	44.681	50.515	29.761	1.00	19.99	A
	ATOM	768	O	ASN	A	121	44.107	50.629	28.676	1.00	19.59	A
	ATOM	769	N	PRO	A	122	45.452	49.452	30.052	1.00	20.58	A
	ATOM	770	CD	PRO	A	122	45.971	49.147	31.397	1.00	21.14	A
	ATOM	771	CA	PRO	A	122	45.731	48.345	29.130	1.00	20.26	A
55	ATOM	772	CB	PRO	A	122	46.423	47.310	30.026	1.00	21.39	A
	ATOM	773	CG	PRO	A	122	45.933	47.649	31.409	1.00	22.22	A
	ATOM	774	C	PRO	A	122	44.581	47.752	28.314	1.00	20.19	A
	ATOM	775	O	PRO	A	122	44.802	47.304	27.188	1.00	19.85	A
	ATOM	776	N	GLU	A	123	43.365	47.751	28.858	1.00	19.32	A

5	ATOM	777	CA	GLU	A	123	42.224	47.190	28.133	1.00	19.92	A
	ATOM	778	CB	GLU	A	123	41.204	46.586	29.101	1.00	21.89	A
	ATOM	779	CG	GLU	A	123	41.481	45.143	29.478	1.00	26.85	A
	ATOM	780	CD	GLU	A	123	42.679	44.995	30.383	1.00	29.19	A
	ATOM	781	OE1	GLU	A	123	42.681	45.630	31.459	1.00	31.66	A
	ATOM	782	OE2	GLU	A	123	43.612	44.244	30.022	1.00	32.08	A
	ATOM	783	C	GLU	A	123	41.504	48.168	27.213	1.00	18.82	A
	ATOM	784	O	GLU	A	123	40.677	47.759	26.396	1.00	18.51	A
	ATOM	785	N	MET	A	124	41.799	49.456	27.350	1.00	17.76	A
	ATOM	786	CA	MET	A	124	41.165	50.462	26.505	1.00	17.02	A
10	ATOM	787	CB	MET	A	124	41.418	51.861	27.068	1.00	17.84	A
	ATOM	788	CG	MET	A	124	40.641	52.961	26.357	1.00	17.84	A
	ATOM	789	SD	MET	A	124	38.862	52.633	26.331	1.00	18.84	A
	ATOM	790	CE	MET	A	124	38.252	54.142	25.567	1.00	17.66	A
15	ATOM	791	C	MET	A	124	41.744	50.351	25.092	1.00	16.66	A
	ATOM	792	O	MET	A	124	42.921	50.022	24.922	1.00	15.61	A
	ATOM	793	N	LYS	A	125	40.913	50.622	24.089	1.00	15.94	A
	ATOM	794	CA	LYS	A	125	41.328	50.543	22.691	1.00	15.72	A
20	ATOM	795	CB	LYS	A	125	40.633	49.355	22.018	1.00	17.14	A
	ATOM	796	CG	LYS	A	125	40.955	48.002	22.649	1.00	19.31	A
	ATOM	797	CD	LYS	A	125	42.349	47.527	22.274	1.00	20.94	A
	ATOM	798	CE	LYS	A	125	42.741	46.260	23.032	1.00	22.65	A
25	ATOM	799	NZ	LYS	A	125	41.809	45.126	22.787	1.00	22.71	A
	ATOM	800	C	LYS	A	125	40.984	51.839	21.952	1.00	14.98	A
	ATOM	801	O	LYS	A	125	40.178	52.641	22.430	1.00	14.40	A
	ATOM	802	N	PHE	A	126	41.576	52.039	20.778	1.00	13.76	A
30	ATOM	803	CA	PHE	A	126	41.328	53.263	20.017	1.00	12.78	A
	ATOM	804	CB	PHE	A	126	42.085	54.418	20.695	1.00	12.49	A
	ATOM	805	CG	PHE	A	126	41.714	55.796	20.199	1.00	12.62	A
	ATOM	806	CD1	PHE	A	126	40.391	56.230	20.210	1.00	12.40	A
35	ATOM	807	CD2	PHE	A	126	42.706	56.687	19.794	1.00	12.56	A
	ATOM	808	CE1	PHE	A	126	40.061	57.533	19.831	1.00	12.41	A
	ATOM	809	CE2	PHE	A	126	42.390	57.993	19.411	1.00	13.74	A
	ATOM	810	CZ	PHE	A	126	41.063	58.418	19.431	1.00	12.79	A
40	ATOM	811	C	PHE	A	126	41.825	53.079	18.582	1.00	12.52	A
	ATOM	812	O	PHE	A	126	42.898	52.523	18.365	1.00	12.34	A
	ATOM	813	N	ILE	A	127	41.043	53.525	17.603	1.00	12.50	A
	ATOM	814	CA	ILE	A	127	41.472	53.415	16.212	1.00	12.28	A
45	ATOM	815	CB	ILE	A	127	40.427	52.685	15.341	1.00	12.64	A
	ATOM	816	CG2	ILE	A	127	40.257	51.258	15.844	1.00	13.41	A
	ATOM	817	CG1	ILE	A	127	39.090	53.432	15.366	1.00	12.14	A
	ATOM	818	CD1	ILE	A	127	38.065	52.865	14.402	1.00	11.36	A
50	ATOM	819	C	ILE	A	127	41.735	54.806	15.640	1.00	12.00	A
	ATOM	820	O	ILE	A	127	41.066	55.777	16.016	1.00	12.38	A
	ATOM	821	N	TRP	A	128	42.720	54.905	14.749	1.00	11.18	A
	ATOM	822	CA	TRP	A	128	43.067	56.187	14.137	1.00	10.75	A
55	ATOM	823	CB	TRP	A	128	44.379	56.714	14.713	1.00	10.60	A
	ATOM	824	CG	TRP	A	128	44.614	58.143	14.353	1.00	11.47	A
	ATOM	825	CD2	TRP	A	128	44.052	59.285	15.004	1.00	11.70	A
	ATOM	826	CE2	TRP	A	128	44.492	60.427	14.298	1.00	11.23	A
55	ATOM	827	CE3	TRP	A	128	43.214	59.455	16.117	1.00	11.54	A
	ATOM	828	CD1	TRP	A	128	45.353	58.620	13.307	1.00	12.07	A
	ATOM	829	NE1	TRP	A	128	45.285	59.995	13.268	1.00	11.96	A
	ATOM	830	CZ2	TRP	A	128	44.122	61.726	14.670	1.00	11.49	A
55	ATOM	831	CZ3	TRP	A	128	42.847	60.747	16.484	1.00	11.63	A

5	ATOM	832	CH2	TRP	A	128	43.302	61.865	15.761	1.00	11.38	A
	ATOM	833	C	TRP	A	128	43.180	56.072	12.618	1.00	10.84	A
	ATOM	834	O	TRP	A	128	43.820	55.157	12.102	1.00	9.94	A
	ATOM	835	N	ALA	A	129	42.582	57.024	11.904	1.00	10.82	A
	ATOM	836	CA	ALA	A	129	42.584	56.974	10.442	1.00	10.83	A
10	ATOM	837	CB	ALA	A	129	41.146	57.062	9.939	1.00	10.81	A
	ATOM	838	C	ALA	A	129	43.439	57.982	9.675	1.00	11.28	A
	ATOM	839	O	ALA	A	129	44.077	57.620	8.690	1.00	12.05	A
	ATOM	840	N	GLU	A	130	43.450	59.234	10.122	1.00	11.63	A
	ATOM	841	CA	GLU	A	130	44.178	60.298	9.426	1.00	11.80	A
15	ATOM	842	CB	GLU	A	130	43.488	61.640	9.687	1.00	13.00	A
	ATOM	843	CG	GLU	A	130	41.996	61.654	9.375	1.00	13.47	A
	ATOM	844	CD	GLU	A	130	41.150	61.054	10.488	1.00	14.76	A
	ATOM	845	OE1	GLU	A	130	41.706	60.745	11.564	1.00	13.75	A
	ATOM	846	OE2	GLU	A	130	39.925	60.903	10.289	1.00	14.95	A
20	ATOM	847	C	GLU	A	130	45.663	60.422	9.756	1.00	12.54	A
	ATOM	848	O	GLU	A	130	46.044	61.043	10.751	1.00	11.25	A
	ATOM	849	N	ILE	A	131	46.507	59.871	8.889	1.00	12.10	A
	ATOM	850	CA	ILE	A	131	47.943	59.908	9.125	1.00	12.15	A
	ATOM	851	CB	ILE	A	131	48.672	58.902	8.205	1.00	12.97	A
25	ATOM	852	CG2	ILE	A	131	50.158	58.847	8.544	1.00	13.74	A
	ATOM	853	CG1	ILE	A	131	48.058	57.509	8.395	1.00	12.19	A
	ATOM	854	CD1	ILE	A	131	47.933	57.084	9.859	1.00	13.31	A
	ATOM	855	C	ILE	A	131	48.564	61.303	9.002	1.00	12.69	A
	ATOM	856	O	ILE	A	131	49.597	61.571	9.622	1.00	12.44	A
30	ATOM	857	N	SER	A	132	47.944	62.192	8.226	1.00	11.77	A
	ATOM	858	CA	SER	A	132	48.462	63.553	8.087	1.00	12.31	A
	ATOM	859	CB	SER	A	132	47.519	64.417	7.231	1.00	12.20	A
	ATOM	860	OG	SER	A	132	46.188	64.405	7.729	1.00	12.12	A
	ATOM	861	C	SER	A	132	48.606	64.161	9.485	1.00	12.41	A
35	ATOM	862	O	SER	A	132	49.629	64.772	9.809	1.00	11.98	A
	ATOM	863	N	TYR	A	133	47.578	63.979	10.310	1.00	12.31	A
	ATOM	864	CA	TYR	A	133	47.588	64.481	11.682	1.00	12.43	A
	ATOM	865	CB	TYR	A	133	46.191	64.393	12.299	1.00	12.01	A
	ATOM	866	CG	TYR	A	133	45.288	65.569	12.000	1.00	11.67	A
40	ATOM	867	CD1	TYR	A	133	44.018	65.373	11.464	1.00	11.27	A
	ATOM	868	CE1	TYR	A	133	43.172	66.448	11.205	1.00	11.78	A
	ATOM	869	CD2	TYR	A	133	45.699	66.875	12.274	1.00	11.66	A
	ATOM	870	CE2	TYR	A	133	44.864	67.959	12.022	1.00	12.29	A
	ATOM	871	CZ	TYR	A	133	43.603	67.738	11.488	1.00	12.81	A
45	ATOM	872	OH	TYR	A	133	42.772	68.809	11.248	1.00	13.96	A
	ATOM	873	C	TYR	A	133	48.553	63.689	12.564	1.00	12.72	A
	ATOM	874	O	TYR	A	133	49.314	64.275	13.339	1.00	13.12	A
	ATOM	875	N	PHE	A	134	48.526	62.363	12.449	1.00	12.21	A
	ATOM	876	CA	PHE	A	134	49.397	61.539	13.282	1.00	13.09	A
50	ATOM	877	CB	PHE	A	134	49.144	60.048	13.053	1.00	12.74	A
	ATOM	878	CG	PHE	A	134	49.661	59.181	14.168	1.00	12.47	A
	ATOM	879	CD1	PHE	A	134	48.915	59.008	15.332	1.00	12.84	A
	ATOM	880	CD2	PHE	A	134	50.921	58.600	14.090	1.00	12.46	A
	ATOM	881	CE1	PHE	A	134	49.420	58.273	16.405	1.00	12.65	A
55	ATOM	882	CE2	PHE	A	134	51.437	57.864	15.155	1.00	12.74	A
	ATOM	883	CZ	PHE	A	134	50.684	57.702	16.318	1.00	12.65	A
	ATOM	884	C	PHE	A	134	50.874	61.829	13.055	1.00	14.10	A
	ATOM	885	O	PHE	A	134	51.655	61.896	14.009	1.00	13.54	A
	ATOM	886	N	ALA	A	135	51.261	61.990	11.793	1.00	14.28	A

5	ATOM	887	CA	ALA	A	135	52.653	62.271	11.466	1.00	15.41	A
	ATOM	888	CB	ALA	A	135	52.841	62.273	9.955	1.00	14.73	A
	ATOM	889	C	ALA	A	135	53.065	63.619	12.062	1.00	16.07	A
	ATOM	890	O	ALA	A	135	54.161	63.756	12.607	1.00	17.46	A
	ATOM	891	N	ARG	A	136	52.178	64.604	11.954	1.00	15.92	A
10	ATOM	892	CA	ARG	A	136	52.413	65.947	12.487	1.00	17.41	A
	ATOM	893	CB	ARG	A	136	51.188	66.829	12.215	1.00	18.09	A
	ATOM	894	CG	ARG	A	136	51.225	68.223	12.856	1.00	19.04	A
	ATOM	895	CD	ARG	A	136	51.950	69.249	11.986	1.00	20.59	A
	ATOM	896	NE	ARG	A	136	51.870	70.596	12.557	1.00	20.53	A
15	ATOM	897	CZ	ARG	A	136	52.504	70.967	13.665	1.00	21.02	A
	ATOM	898	NH1	ARG	A	136	53.268	70.094	14.309	1.00	21.09	A
	ATOM	899	NH2	ARG	A	136	52.366	72.199	14.138	1.00	20.47	A
	ATOM	900	C	ARG	A	136	52.659	65.866	13.997	1.00	17.71	A
	ATOM	901	O	ARG	A	136	53.552	66.521	14.536	1.00	17.71	A
20	ATOM	902	N	PHE	A	137	51.856	65.045	14.666	1.00	16.73	A
	ATOM	903	CA	PHE	A	137	51.948	64.856	16.109	1.00	16.04	A
	ATOM	904	CB	PHE	A	137	50.730	64.065	16.589	1.00	16.01	A
	ATOM	905	CG	PHE	A	137	50.711	63.815	18.066	1.00	16.01	A
	ATOM	906	CD1	PHE	A	137	50.393	64.839	18.952	1.00	16.16	A
25	ATOM	907	CD2	PHE	A	137	51.009	62.553	18.572	1.00	16.49	A
	ATOM	908	CE1	PHE	A	137	50.370	64.611	20.323	1.00	16.36	A
	ATOM	909	CE2	PHE	A	137	50.989	62.316	19.947	1.00	16.39	A
	ATOM	910	CZ	PHE	A	137	50.667	63.349	20.821	1.00	16.41	A
	ATOM	911	C	PHE	A	137	53.218	64.115	16.518	1.00	16.50	A
30	ATOM	912	O	PHE	A	137	54.012	64.600	17.329	1.00	15.50	A
	ATOM	913	N	TYR	A	138	53.398	62.930	15.944	1.00	16.96	A
	ATOM	914	CA	TYR	A	138	54.544	62.084	16.243	1.00	19.17	A
	ATOM	915	CB	TYR	A	138	54.547	60.866	15.323	1.00	18.81	A
	ATOM	916	CG	TYR	A	138	55.577	59.830	15.706	1.00	19.98	A
35	ATOM	917	CD1	TYR	A	138	55.330	58.927	16.736	1.00	20.01	A
	ATOM	918	CE1	TYR	A	138	56.272	57.965	17.093	1.00	21.20	A
	ATOM	919	CD2	TYR	A	138	56.801	59.751	15.040	1.00	19.71	A
	ATOM	920	CE2	TYR	A	138	57.752	58.791	15.390	1.00	20.51	A
	ATOM	921	CZ	TYR	A	138	57.477	57.902	16.414	1.00	20.46	A
40	ATOM	922	OH	TYR	A	138	58.393	56.934	16.753	1.00	21.98	A
	ATOM	923	C	TYR	A	138	55.895	62.788	16.137	1.00	20.16	A
	ATOM	924	O	TYR	A	138	56.737	62.662	17.030	1.00	19.95	A
	ATOM	925	N	HIS	A	139	56.116	63.516	15.047	1.00	21.15	A
	ATOM	926	CA	HIS	A	139	57.391	64.206	14.870	1.00	23.05	A
45	ATOM	927	CB	HIS	A	139	57.491	64.788	13.459	1.00	23.52	A
	ATOM	928	CG	HIS	A	139	57.664	63.749	12.394	1.00	25.29	A
	ATOM	929	CD2	HIS	A	139	56.872	63.396	11.353	1.00	25.23	A
	ATOM	930	ND1	HIS	A	139	58.766	62.922	12.333	1.00	26.05	A
	ATOM	931	CE1	HIS	A	139	58.645	62.106	11.301	1.00	26.57	A
50	ATOM	932	NE2	HIS	A	139	57.505	62.373	10.690	1.00	25.58	A
	ATOM	933	C	HIS	A	139	57.628	65.297	15.910	1.00	23.20	A
	ATOM	934	O	HIS	A	139	58.763	65.722	16.121	1.00	23.77	A
	ATOM	935	N	ASP	A	140	56.559	65.743	16.560	1.00	23.11	A
	ATOM	936	CA	ASP	A	140	56.663	66.772	17.590	1.00	23.35	A
55	ATOM	937	CB	ASP	A	140	55.405	67.644	17.591	1.00	24.33	A
	ATOM	938	CG	ASP	A	140	55.514	68.827	16.646	1.00	26.10	A
	ATOM	939	OD1	ASP	A	140	56.367	68.786	15.734	1.00	26.58	A
	ATOM	940	OD2	ASP	A	140	54.742	69.796	16.812	1.00	26.82	A
	ATOM	941	C	ASP	A	140	56.879	66.164	18.980	1.00	22.72	A

5	ATOM	942	O	ASP	A	140	57.232	66.868	19.925	1.00	22.14	A
	ATOM	943	N	LEU	A	141	56.674	64.855	19.094	1.00	21.94	A
	ATOM	944	CA	LEU	A	141	56.850	64.155	20.366	1.00	22.28	A
	ATOM	945	CB	LEU	A	141	56.191	62.774	20.322	1.00	22.07	A
	ATOM	946	CG	LEU	A	141	54.673	62.622	20.389	1.00	22.20	A
10	ATOM	947	CD1	LEU	A	141	54.324	61.135	20.279	1.00	21.62	A
	ATOM	948	CD2	LEU	A	141	54.144	63.195	21.695	1.00	21.60	A
	ATOM	949	C	LEU	A	141	58.308	63.959	20.747	1.00	22.47	A
	ATOM	950	O	LEU	A	141	59.178	63.846	19.886	1.00	21.96	A
	ATOM	951	N	GLY	A	142	58.567	63.916	22.050	1.00	23.34	A
15	ATOM	952	CA	GLY	A	142	59.918	63.687	22.524	1.00	24.09	A
	ATOM	953	C	GLY	A	142	60.200	62.205	22.356	1.00	24.71	A
	ATOM	954	O	GLY	A	142	59.268	61.410	22.220	1.00	24.43	A
	ATOM	955	N	GLU	A	143	61.473	61.826	22.371	1.00	25.38	A
	ATOM	956	CA	GLU	A	143	61.861	60.432	22.196	1.00	26.27	A
20	ATOM	957	CB	GLU	A	143	63.379	60.292	22.323	1.00	27.58	A
	ATOM	958	CG	GLU	A	143	63.922	58.940	21.884	1.00	29.88	A
	ATOM	959	CD	GLU	A	143	63.538	58.590	20.455	1.00	31.60	A
	ATOM	960	OE1	GLU	A	143	63.736	59.433	19.555	1.00	33.17	A
	ATOM	961	OE2	GLU	A	143	63.042	57.467	20.230	1.00	32.74	A
25	ATOM	962	C	GLU	A	143	61.170	59.477	23.166	1.00	26.12	A
	ATOM	963	O	GLU	A	143	60.738	58.394	22.772	1.00	25.94	A
	ATOM	964	N	ASN	A	144	61.067	59.871	24.430	1.00	26.24	A
	ATOM	965	CA	ASN	A	144	60.421	59.028	25.431	1.00	26.68	A
	ATOM	966	CB	ASN	A	144	60.460	59.713	26.806	1.00	28.10	A
30	ATOM	967	CG	ASN	A	144	59.674	58.953	27.866	1.00	30.54	A
	ATOM	968	OD1	ASN	A	144	58.439	58.938	27.854	1.00	31.68	A
	ATOM	969	ND2	ASN	A	144	60.390	58.316	28.791	1.00	31.00	A
	ATOM	970	C	ASN	A	144	58.977	58.725	25.031	1.00	25.49	A
	ATOM	971	O	ASN	A	144	58.539	57.575	25.089	1.00	25.02	A
35	ATOM	972	N	LYS	A	145	58.249	59.757	24.613	1.00	24.88	A
	ATOM	973	CA	LYS	A	145	56.855	59.595	24.205	1.00	24.21	A
	ATOM	974	CB	LYS	A	145	56.180	60.964	24.072	1.00	24.66	A
	ATOM	975	CG	LYS	A	145	55.898	61.642	25.410	1.00	26.34	A
	ATOM	976	CD	LYS	A	145	54.937	60.805	26.245	1.00	27.93	A
40	ATOM	977	CE	LYS	A	145	54.660	61.433	27.608	1.00	29.60	A
	ATOM	978	NZ	LYS	A	145	55.876	61.471	28.469	1.00	31.08	A
	ATOM	979	C	LYS	A	145	56.705	58.804	22.907	1.00	23.37	A
	ATOM	980	O	LYS	A	145	55.740	58.055	22.745	1.00	22.99	A
	ATOM	981	N	LYS	A	146	57.648	58.968	21.981	1.00	22.74	A
45	ATOM	982	CA	LYS	A	146	57.594	58.226	20.724	1.00	21.93	A
	ATOM	983	CB	LYS	A	146	58.764	58.599	19.804	1.00	22.03	A
	ATOM	984	CG	LYS	A	146	58.632	59.956	19.126	1.00	22.74	A
	ATOM	985	CD	LYS	A	146	59.765	60.194	18.136	1.00	23.91	A
	ATOM	986	CE	LYS	A	146	59.607	61.537	17.437	1.00	24.86	A
50	ATOM	987	NZ	LYS	A	146	60.724	61.791	16.495	1.00	26.86	A
	ATOM	988	C	LYS	A	146	57.652	56.735	21.034	1.00	21.31	A
	ATOM	989	O	LYS	A	146	56.973	55.935	20.396	1.00	20.71	A
	ATOM	990	N	LEU	A	147	58.466	56.371	22.022	1.00	20.89	A
	ATOM	991	CA	LEU	A	147	58.612	54.978	22.427	1.00	20.24	A
55	ATOM	992	CB	LEU	A	147	59.790	54.829	23.396	1.00	21.06	A
	ATOM	993	CG	LEU	A	147	61.170	55.069	22.769	1.00	21.23	A
	ATOM	994	CD1	LEU	A	147	62.262	54.965	23.827	1.00	22.02	A
	ATOM	995	CD2	LEU	A	147	61.405	54.044	21.668	1.00	22.53	A
	ATOM	996	C	LEU	A	147	57.325	54.455	23.067	1.00	20.09	A

5	ATOM	997	O	LEU	A	147	56.907	53.330	22.796	1.00	19.03	A
	ATOM	998	N	GLN	A	148	56.699	55.260	23.920	1.00	20.05	A
	ATOM	999	CA	GLN	A	148	55.448	54.839	24.541	1.00	20.20	A
	ATOM	1000	CB	GLN	A	148	54.951	55.874	25.553	1.00	21.98	A
	ATOM	1001	CG	GLN	A	148	55.697	55.876	26.873	1.00	26.14	A
10	ATOM	1002	CD	GLN	A	148	55.039	56.771	27.910	1.00	28.69	A
	ATOM	1003	OE1	GLN	A	148	55.477	56.830	29.061	1.00	30.91	A
	ATOM	1004	NE2	GLN	A	148	53.980	57.472	27.507	1.00	28.81	A
	ATOM	1005	C	GLN	A	148	54.387	54.657	23.459	1.00	18.95	A
	ATOM	1006	O	GLN	A	148	53.566	53.743	23.527	1.00	18.96	A
15	ATOM	1007	N	MET	A	149	54.410	55.533	22.462	1.00	17.60	A
	ATOM	1008	CA	MET	A	149	53.440	55.462	21.376	1.00	16.91	A
	ATOM	1009	CB	MET	A	149	53.563	56.690	20.471	1.00	17.32	A
	ATOM	1010	CG	MET	A	149	52.539	56.743	19.344	1.00	17.23	A
	ATOM	1011	SD	MET	A	149	50.830	56.820	19.927	1.00	19.29	A
20	ATOM	1012	CE	MET	A	149	50.590	58.587	20.083	1.00	18.52	A
	ATOM	1013	C	MET	A	149	53.641	54.190	20.558	1.00	16.89	A
	ATOM	1014	O	MET	A	149	52.680	53.502	20.226	1.00	14.92	A
	ATOM	1015	N	LYS	A	150	54.892	53.872	20.239	1.00	17.09	A
	ATOM	1016	CA	LYS	A	150	55.171	52.675	19.458	1.00	18.24	A
25	ATOM	1017	CB	LYS	A	150	56.660	52.593	19.106	1.00	19.09	A
	ATOM	1018	CG	LYS	A	150	57.130	53.715	18.192	1.00	22.02	A
	ATOM	1019	CD	LYS	A	150	58.638	53.704	17.997	1.00	24.66	A
	ATOM	1020	CE	LYS	A	150	59.093	52.476	17.234	1.00	26.81	A
	ATOM	1021	NZ	LYS	A	150	60.558	52.520	16.961	1.00	29.58	A
30	ATOM	1022	C	LYS	A	150	54.745	51.422	20.209	1.00	18.20	A
	ATOM	1023	O	LYS	A	150	54.317	50.446	19.597	1.00	18.07	A
	ATOM	1024	N	SER	A	151	54.843	51.455	21.536	1.00	18.74	A
	ATOM	1025	CA	SER	A	151	54.474	50.295	22.339	1.00	19.47	A
	ATOM	1026	CB	SER	A	151	55.005	50.440	23.770	1.00	21.09	A
35	ATOM	1027	OG	SER	A	151	54.283	51.425	24.481	1.00	24.31	A
	ATOM	1028	C	SER	A	151	52.968	50.029	22.371	1.00	19.31	A
	ATOM	1029	O	SER	A	151	52.547	48.875	22.278	1.00	18.16	A
	ATOM	1030	N	ILE	A	152	52.150	51.073	22.499	1.00	18.86	A
	ATOM	1031	CA	ILE	A	152	50.710	50.848	22.526	1.00	18.53	A
40	ATOM	1032	CB	ILE	A	152	49.926	52.069	23.075	1.00	18.94	A
	ATOM	1033	CG2	ILE	A	152	50.259	52.272	24.547	1.00	19.11	A
	ATOM	1034	CG1	ILE	A	152	50.243	53.328	22.272	1.00	18.05	A
	ATOM	1035	CD1	ILE	A	152	49.361	54.503	22.647	1.00	19.59	A
	ATOM	1036	C	ILE	A	152	50.176	50.464	21.146	1.00	18.93	A
45	ATOM	1037	O	ILE	A	152	49.071	49.940	21.026	1.00	18.92	A
	ATOM	1038	N	VAL	A	153	50.962	50.720	20.105	1.00	18.77	A
	ATOM	1039	CA	VAL	A	153	50.561	50.341	18.752	1.00	19.06	A
	ATOM	1040	CB	VAL	A	153	51.279	51.193	17.683	1.00	19.26	A
	ATOM	1041	CG1	VAL	A	153	51.069	50.589	16.295	1.00	18.53	A
50	ATOM	1042	CG2	VAL	A	153	50.745	52.617	17.716	1.00	18.92	A
	ATOM	1043	C	VAL	A	153	50.959	48.878	18.580	1.00	19.85	A
	ATOM	1044	O	VAL	A	153	50.177	48.053	18.108	1.00	18.89	A
	ATOM	1045	N	LYS	A	154	52.183	48.564	18.993	1.00	20.46	A
	ATOM	1046	CA	LYS	A	154	52.696	47.205	18.893	1.00	22.15	A
55	ATOM	1047	CB	LYS	A	154	54.143	47.155	19.397	1.00	23.38	A
	ATOM	1048	CG	LYS	A	154	54.885	45.877	19.026	1.00	26.39	A
	ATOM	1049	CD	LYS	A	154	56.375	45.976	19.337	1.00	28.38	A
	ATOM	1050	CE	LYS	A	154	56.662	45.794	20.822	1.00	30.74	A
	ATOM	1051	NZ	LYS	A	154	55.974	46.793	21.694	1.00	32.22	A

5	ATOM	1052	C	LYS	A	154	51.836	46.218	19.685	1.00	22.01	A
	ATOM	1053	O	LYS	A	154	51.608	45.090	19.236	1.00	22.53	A
	ATOM	1054	N	ASN	A	155	51.349	46.642	20.852	1.00	21.36	A
	ATOM	1055	CA	ASN	A	155	50.529	45.771	21.691	1.00	21.36	A
	ATOM	1056	CB	ASN	A	155	50.643	46.174	23.172	1.00	22.78	A
10	ATOM	1057	CG	ASN	A	155	49.845	47.425	23.515	1.00	23.55	A
	ATOM	1058	OD1	ASN	A	155	49.106	47.954	22.687	1.00	24.96	A
	ATOM	1059	ND2	ASN	A	155	49.987	47.898	24.753	1.00	22.79	A
	ATOM	1060	C	ASN	A	155	49.054	45.709	21.285	1.00	20.96	A
	ATOM	1061	O	ASN	A	155	48.271	44.991	21.899	1.00	20.84	A
15	ATOM	1062	N	GLY	A	156	48.672	46.476	20.267	1.00	20.22	A
	ATOM	1063	CA	GLY	A	156	47.298	46.431	19.790	1.00	19.12	A
	ATOM	1064	C	GLY	A	156	46.256	47.367	20.378	1.00	18.60	A
	ATOM	1065	O	GLY	A	156	45.082	47.270	20.011	1.00	18.18	A
	ATOM	1066	N	GLN	A	157	46.652	48.266	21.276	1.00	17.29	A
20	ATOM	1067	CA	GLN	A	157	45.689	49.195	21.871	1.00	16.05	A
	ATOM	1068	CB	GLN	A	157	46.242	49.809	23.150	1.00	16.21	A
	ATOM	1069	CG	GLN	A	157	46.297	48.867	24.333	1.00	16.29	A
	ATOM	1070	CD	GLN	A	157	46.569	49.621	25.612	1.00	16.60	A
	ATOM	1071	OE1	GLN	A	157	45.672	50.249	26.178	1.00	18.00	A
25	ATOM	1072	NE2	GLN	A	157	47.813	49.591	26.060	1.00	15.39	A
	ATOM	1073	C	GLN	A	157	45.305	50.320	20.917	1.00	15.53	A
	ATOM	1074	O	GLN	A	157	44.142	50.700	20.832	1.00	15.19	A
	ATOM	1075	N	LEU	A	158	46.298	50.881	20.235	1.00	14.97	A
	ATOM	1076	CA	LEU	A	158	46.048	51.937	19.265	1.00	15.35	A
30	ATOM	1077	CB	LEU	A	158	47.045	53.089	19.439	1.00	16.96	A
	ATOM	1078	CG	LEU	A	158	46.943	54.280	18.473	1.00	19.11	A
	ATOM	1079	CD1	LEU	A	158	47.454	53.891	17.096	1.00	21.08	A
	ATOM	1080	CD2	LEU	A	158	45.509	54.763	18.388	1.00	20.07	A
	ATOM	1081	C	LEU	A	158	46.229	51.276	17.907	1.00	14.83	A
35	ATOM	1082	O	LEU	A	158	47.308	50.773	17.594	1.00	13.42	A
	ATOM	1083	N	GLU	A	159	45.169	51.273	17.107	1.00	13.60	A
	ATOM	1084	CA	GLU	A	159	45.227	50.636	15.802	1.00	13.04	A
	ATOM	1085	CB	GLU	A	159	44.271	49.442	15.771	1.00	13.44	A
	ATOM	1086	CG	GLU	A	159	44.212	48.714	14.436	1.00	12.38	A
40	ATOM	1087	CD	GLU	A	159	43.265	47.531	14.476	1.00	13.56	A
	ATOM	1088	OE1	GLU	A	159	43.594	46.533	15.152	1.00	12.89	A
	ATOM	1089	OE2	GLU	A	159	42.190	47.603	13.841	1.00	13.05	A
	ATOM	1090	C	GLU	A	159	44.888	51.594	14.671	1.00	12.84	A
	ATOM	1091	O	GLU	A	159	43.910	52.333	14.739	1.00	12.78	A
45	ATOM	1092	N	PHE	A	160	45.709	51.578	13.632	1.00	12.42	A
	ATOM	1093	CA	PHE	A	160	45.467	52.437	12.491	1.00	12.26	A
	ATOM	1094	CB	PHE	A	160	46.782	52.808	11.807	1.00	11.78	A
	ATOM	1095	CG	PHE	A	160	47.712	53.586	12.689	1.00	12.41	A
	ATOM	1096	CD1	PHE	A	160	48.758	52.951	13.354	1.00	12.62	A
50	ATOM	1097	CD2	PHE	A	160	47.512	54.947	12.897	1.00	12.79	A
	ATOM	1098	CE1	PHE	A	160	49.589	53.661	14.216	1.00	12.69	A
	ATOM	1099	CE2	PHE	A	160	48.339	55.666	13.760	1.00	13.12	A
	ATOM	1100	CZ	PHE	A	160	49.375	55.020	14.418	1.00	12.71	A
	ATOM	1101	C	PHE	A	160	44.546	51.734	11.515	1.00	12.26	A
55	ATOM	1102	O	PHE	A	160	44.719	50.549	11.216	1.00	11.96	A
	ATOM	1103	N	VAL	A	161	43.546	52.470	11.047	1.00	12.03	A
	ATOM	1104	CA	VAL	A	161	42.592	51.945	10.087	1.00	11.93	A
	ATOM	1105	CB	VAL	A	161	41.139	52.092	10.605	1.00	11.85	A
	ATOM	1106	CG1	VAL	A	161	40.918	51.135	11.778	1.00	11.73	A

5	ATOM	1107	CG2	VAL	A	161	40.874	53.526	11.059	1.00	11.37	A
	ATOM	1108	C	VAL	A	161	42.807	52.720	8.792	1.00	12.32	A
	ATOM	1109	O	VAL	A	161	42.890	53.953	8.802	1.00	12.53	A
	ATOM	1110	N	THR	A	162	42.913	51.977	7.690	1.00	12.37	A
	ATOM	1111	CA	THR	A	162	43.179	52.519	6.358	1.00	12.07	A
10	ATOM	1112	CB	THR	A	162	42.266	53.716	5.990	1.00	11.93	A
	ATOM	1113	OG1	THR	A	162	40.893	53.308	6.020	1.00	11.88	A
	ATOM	1114	CG2	THR	A	162	42.591	54.204	4.576	1.00	11.95	A
	ATOM	1115	C	THR	A	162	44.640	52.971	6.310	1.00	12.30	A
	ATOM	1116	O	THR	A	162	45.448	52.416	5.565	1.00	12.72	A
15	ATOM	1117	N	GLY	A	163	44.981	53.973	7.112	1.00	11.76	A
	ATOM	1118	CA	GLY	A	163	46.356	54.444	7.144	1.00	11.74	A
	ATOM	1119	C	GLY	A	163	46.722	55.405	6.032	1.00	12.16	A
	ATOM	1120	O	GLY	A	163	47.895	55.554	5.698	1.00	11.80	A
	ATOM	1121	N	GLY	A	164	45.718	56.049	5.449	1.00	11.89	A
20	ATOM	1122	CA	GLY	A	164	45.979	57.012	4.397	1.00	11.02	A
	ATOM	1123	C	GLY	A	164	46.273	58.376	4.995	1.00	10.65	A
	ATOM	1124	O	GLY	A	164	45.990	58.626	6.169	1.00	10.03	A
	ATOM	1125	N	TRP	A	165	46.849	59.263	4.192	1.00	10.36	A
	ATOM	1126	CA	TRP	A	165	47.163	60.607	4.662	1.00	10.35	A
25	ATOM	1127	CB	TRP	A	165	47.748	61.432	3.511	1.00	10.07	A
	ATOM	1128	CG	TRP	A	165	48.536	62.640	3.941	1.00	11.12	A
	ATOM	1129	CD2	TRP	A	165	49.723	62.652	4.747	1.00	10.98	A
	ATOM	1130	CE2	TRP	A	165	50.142	63.999	4.855	1.00	11.20	A
	ATOM	1131	CE3	TRP	A	165	50.474	61.657	5.385	1.00	11.21	A
30	ATOM	1132	CD1	TRP	A	165	48.291	63.943	3.605	1.00	10.95	A
	ATOM	1133	NE1	TRP	A	165	49.251	64.764	4.151	1.00	11.36	A
	ATOM	1134	CZ2	TRP	A	165	51.282	64.378	5.580	1.00	11.19	A
	ATOM	1135	CZ3	TRP	A	165	51.611	62.036	6.106	1.00	12.25	A
	ATOM	1136	CH2	TRP	A	165	52.000	63.384	6.194	1.00	11.49	A
35	ATOM	1137	C	TRP	A	165	45.852	61.224	5.157	1.00	10.30	A
	ATOM	1138	O	TRP	A	165	45.827	61.956	6.148	1.00	10.10	A
	ATOM	1139	N	VAL	A	166	44.761	60.896	4.470	1.00	9.73	A
	ATOM	1140	CA	VAL	A	166	43.430	61.395	4.824	1.00	10.15	A
	ATOM	1141	CB	VAL	A	166	43.021	62.605	3.929	1.00	9.63	A
40	ATOM	1142	CG1	VAL	A	166	44.055	63.729	4.045	1.00	9.13	A
	ATOM	1143	CG2	VAL	A	166	42.896	62.159	2.463	1.00	9.97	A
	ATOM	1144	C	VAL	A	166	42.400	60.287	4.594	1.00	10.04	A
	ATOM	1145	O	VAL	A	166	42.758	59.151	4.295	1.00	10.65	A
	ATOM	1146	N	MET	A	167	41.127	60.632	4.772	1.00	10.36	A
45	ATOM	1147	CA	MET	A	167	40.001	59.734	4.499	1.00	10.42	A
	ATOM	1148	CB	MET	A	167	38.989	59.745	5.645	1.00	10.35	A
	ATOM	1149	CG	MET	A	167	37.730	58.933	5.360	1.00	10.42	A
	ATOM	1150	SD	MET	A	167	36.561	58.990	6.731	1.00	11.54	A
	ATOM	1151	CE	MET	A	167	37.552	58.165	8.029	1.00	10.43	A
50	ATOM	1152	C	MET	A	167	39.454	60.498	3.298	1.00	10.44	A
	ATOM	1153	O	MET	A	167	38.655	61.425	3.444	1.00	10.65	A
	ATOM	1154	N	PRO	A	168	39.878	60.111	2.086	1.00	10.26	A
	ATOM	1155	CD	PRO	A	168	40.630	58.883	1.758	1.00	9.75	A
	ATOM	1156	CA	PRO	A	168	39.445	60.792	0.868	1.00	9.97	A
55	ATOM	1157	CB	PRO	A	168	40.371	60.202	-0.189	1.00	9.78	A
	ATOM	1158	CG	PRO	A	168	40.438	58.762	0.240	1.00	9.78	A
	ATOM	1159	C	PRO	A	168	38.004	60.763	0.400	1.00	10.51	A
	ATOM	1160	O	PRO	A	168	37.240	59.844	0.690	1.00	9.40	A
	ATOM	1161	N	ASP	A	169	37.663	61.809	-0.344	1.00	10.38	A

5	ATOM	1162	CA	ASP	A	169	36.370	61.915	-0.981	1.00	10.54	A
	ATOM	1163	CB	ASP	A	169	36.276	63.231	-1.755	1.00	9.36	A
	ATOM	1164	CG	ASP	A	169	35.158	63.227	-2.776	1.00	9.43	A
	ATOM	1165	OD1	ASP	A	169	34.069	62.705	-2.462	1.00	8.82	A
	ATOM	1166	OD2	ASP	A	169	35.363	63.758	-3.885	1.00	9.69	A
	ATOM	1167	C	ASP	A	169	36.463	60.746	-1.959	1.00	11.05	A
	ATOM	1168	O	ASP	A	169	37.565	60.380	-2.373	1.00	10.71	A
	ATOM	1169	N	GLU	A	170	35.332	60.151	-2.322	1.00	11.08	A
10	ATOM	1170	CA	GLU	A	170	35.369	59.027	-3.249	1.00	10.86	A
	ATOM	1171	CB	GLU	A	170	34.767	57.779	-2.578	1.00	11.08	A
	ATOM	1172	CG	GLU	A	170	35.637	57.256	-1.428	1.00	10.82	A
	ATOM	1173	CD	GLU	A	170	35.030	56.067	-0.694	1.00	10.92	A
15	ATOM	1174	OE1	GLU	A	170	34.242	55.321	-1.311	1.00	9.84	A
	ATOM	1175	OE2	GLU	A	170	35.368	55.869	0.497	1.00	10.95	A
	ATOM	1176	C	GLU	A	170	34.668	59.325	-4.569	1.00	10.67	A
	ATOM	1177	O	GLU	A	170	34.655	58.491	-5.473	1.00	10.61	A
	ATOM	1178	N	ALA	A	171	34.116	60.529	-4.690	1.00	10.81	A
20	ATOM	1179	CA	ALA	A	171	33.404	60.914	-5.907	1.00	10.66	A
	ATOM	1180	CB	ALA	A	171	32.167	61.722	-5.542	1.00	11.39	A
	ATOM	1181	C	ALA	A	171	34.239	61.697	-6.920	1.00	10.93	A
	ATOM	1182	O	ALA	A	171	34.284	61.351	-8.102	1.00	11.16	A
	ATOM	1183	N	ASN	A	172	34.893	62.753	-6.447	1.00	10.71	A
25	ATOM	1184	CA	ASN	A	172	35.689	63.633	-7.298	1.00	9.89	A
	ATOM	1185	CB	ASN	A	172	35.645	65.048	-6.723	1.00	9.48	A
	ATOM	1186	CG	ASN	A	172	34.232	65.588	-6.609	1.00	10.62	A
	ATOM	1187	OD1	ASN	A	172	33.575	65.848	-7.616	1.00	10.69	A
	ATOM	1188	ND2	ASN	A	172	33.759	65.758	-5.377	1.00	10.40	A
30	ATOM	1189	C	ASN	A	172	37.150	63.225	-7.459	1.00	9.84	A
	ATOM	1190	O	ASN	A	172	37.806	63.593	-8.431	1.00	10.10	A
	ATOM	1191	N	SER	A	173	37.657	62.470	-6.498	1.00	9.67	A
	ATOM	1192	CA	SER	A	173	39.055	62.050	-6.511	1.00	9.66	A
	ATOM	1193	CB	SER	A	173	39.378	61.359	-5.194	1.00	8.38	A
35	ATOM	1194	OG	SER	A	173	38.460	60.305	-4.959	1.00	9.36	A
	ATOM	1195	C	SER	A	173	39.442	61.127	-7.659	1.00	9.64	A
	ATOM	1196	O	SER	A	173	38.672	60.246	-8.050	1.00	8.79	A
	ATOM	1197	N	HIS	A	174	40.639	61.338	-8.203	1.00	9.71	A
	ATOM	1198	CA	HIS	A	174	41.126	60.477	-9.271	1.00	9.94	A
40	ATOM	1199	CB	HIS	A	174	42.138	61.215	-10.139	1.00	10.93	A
	ATOM	1200	CG	HIS	A	174	42.377	60.557	-11.458	1.00	10.84	A
	ATOM	1201	CD2	HIS	A	174	41.963	60.888	-12.704	1.00	10.41	A
	ATOM	1202	ND1	HIS	A	174	43.054	59.362	-11.581	1.00	11.12	A
	ATOM	1203	CE1	HIS	A	174	43.043	58.984	-12.846	1.00	11.26	A
45	ATOM	1204	NE2	HIS	A	174	42.387	59.891	-13.548	1.00	10.78	A
	ATOM	1205	C	HIS	A	174	41.791	59.294	-8.564	1.00	9.67	A
	ATOM	1206	O	HIS	A	174	42.422	59.477	-7.524	1.00	8.97	A
	ATOM	1207	N	TRP	A	175	41.651	58.088	-9.111	1.00	9.37	A
	ATOM	1208	CA	TRP	A	175	42.233	56.920	-8.458	1.00	9.44	A
50	ATOM	1209	CB	TRP	A	175	41.962	55.632	-9.257	1.00	9.23	A
	ATOM	1210	CG	TRP	A	175	42.792	55.451	-10.506	1.00	9.39	A
	ATOM	1211	CD2	TRP	A	175	44.084	54.836	-10.588	1.00	9.59	A
	ATOM	1212	CE2	TRP	A	175	44.480	54.871	-11.945	1.00	9.59	A
	ATOM	1213	CE3	TRP	A	175	44.946	54.258	-9.644	1.00	9.58	A
55	ATOM	1214	CD1	TRP	A	175	42.465	55.828	-11.777	1.00	9.27	A
	ATOM	1215	NE1	TRP	A	175	43.475	55.481	-12.651	1.00	9.38	A
	ATOM	1216	CZ2	TRP	A	175	45.706	54.348	-12.384	1.00	9.09	A

5	ATOM	1217	CZ3	TRP	A	175	46.165	53.737	-10.080	1.00	9.89	A
	ATOM	1218	CH2	TRP	A	175	46.531	53.788	-11.442	1.00	10.05	A
	ATOM	1219	C	TRP	A	175	43.725	57.083	-8.223	1.00	9.46	A
	ATOM	1220	O	TRP	A	175	44.261	56.583	-7.233	1.00	9.08	A
	ATOM	1221	N	ARG	A	176	44.401	57.788	-9.124	1.00	9.19	A
10	ATOM	1222	CA	ARG	A	176	45.831	58.004	-8.973	1.00	9.28	A
	ATOM	1223	CB	ARG	A	176	46.373	58.761	-10.191	1.00	9.85	A
	ATOM	1224	CG	ARG	A	176	46.429	57.891	-11.447	1.00	10.18	A
	ATOM	1225	CD	ARG	A	176	46.402	58.710	-12.722	1.00	10.64	A
	ATOM	1226	NE	ARG	A	176	47.500	59.666	-12.818	1.00	11.19	A
15	ATOM	1227	CZ	ARG	A	176	47.662	60.500	-13.844	1.00	10.95	A
	ATOM	1228	NH1	ARG	A	176	46.796	60.486	-14.853	1.00	11.00	A
	ATOM	1229	NH2	ARG	A	176	48.679	61.348	-13.860	1.00	10.96	A
	ATOM	1230	C	ARG	A	176	46.146	58.758	-7.676	1.00	9.20	A
	ATOM	1231	O	ARG	A	176	47.117	58.435	-6.984	1.00	9.53	A
20	ATOM	1232	N	ASN	A	177	45.326	59.750	-7.335	1.00	8.80	A
	ATOM	1233	CA	ASN	A	177	45.561	60.511	-6.108	1.00	8.75	A
	ATOM	1234	CB	ASN	A	177	44.906	61.894	-6.190	1.00	8.74	A
	ATOM	1235	CG	ASN	A	177	45.577	62.784	-7.217	1.00	10.06	A
	ATOM	1236	OD1	ASN	A	177	46.762	62.622	-7.507	1.00	10.31	A
25	ATOM	1237	ND2	ASN	A	177	44.826	63.734	-7.766	1.00	11.06	A
	ATOM	1238	C	ASN	A	177	45.077	59.759	-4.870	1.00	8.84	A
	ATOM	1239	O	ASN	A	177	45.578	59.981	-3.763	1.00	8.42	A
	ATOM	1240	N	VAL	A	178	44.100	58.876	-5.049	1.00	8.65	A
	ATOM	1241	CA	VAL	A	178	43.623	58.075	-3.928	1.00	8.81	A
30	ATOM	1242	CB	VAL	A	178	42.408	57.198	-4.329	1.00	9.88	A
	ATOM	1243	CG1	VAL	A	178	42.061	56.223	-3.200	1.00	10.00	A
	ATOM	1244	CG2	VAL	A	178	41.211	58.086	-4.645	1.00	9.98	A
	ATOM	1245	C	VAL	A	178	44.804	57.173	-3.550	1.00	8.79	A
	ATOM	1246	O	VAL	A	178	45.104	56.982	-2.371	1.00	9.06	A
35	ATOM	1247	N	LEU	A	179	45.481	56.633	-4.564	1.00	8.48	A
	ATOM	1248	CA	LEU	A	179	46.637	55.771	-4.325	1.00	8.63	A
	ATOM	1249	CB	LEU	A	179	47.104	55.103	-5.624	1.00	9.00	A
	ATOM	1250	CG	LEU	A	179	48.406	54.287	-5.506	1.00	9.81	A
	ATOM	1251	CD1	LEU	A	179	48.243	53.164	-4.479	1.00	9.86	A
40	ATOM	1252	CD2	LEU	A	179	48.764	53.714	-6.872	1.00	10.42	A
	ATOM	1253	C	LEU	A	179	47.790	56.575	-3.739	1.00	8.69	A
	ATOM	1254	O	LEU	A	179	48.494	56.104	-2.839	1.00	9.30	A
	ATOM	1255	N	LEU	A	180	47.983	57.789	-4.250	1.00	8.07	A
	ATOM	1256	CA	LEU	A	180	49.063	58.643	-3.765	1.00	8.58	A
45	ATOM	1257	CB	LEU	A	180	49.064	59.980	-4.521	1.00	8.65	A
	ATOM	1258	CG	LEU	A	180	50.203	60.946	-4.175	1.00	9.33	A
	ATOM	1259	CD1	LEU	A	180	51.511	60.398	-4.746	1.00	9.58	A
	ATOM	1260	CD2	LEU	A	180	49.913	62.335	-4.735	1.00	9.53	A
	ATOM	1261	C	LEU	A	180	48.926	58.903	-2.262	1.00	8.44	A
50	ATOM	1262	O	LEU	A	180	49.881	58.708	-1.501	1.00	9.34	A
	ATOM	1263	N	GLN	A	181	47.743	59.329	-1.825	1.00	7.79	A
	ATOM	1264	CA	GLN	A	181	47.550	59.623	-0.408	1.00	8.83	A
	ATOM	1265	CB	GLN	A	181	46.254	60.426	-0.184	1.00	8.07	A
	ATOM	1266	CG	GLN	A	181	44.935	59.689	-0.427	1.00	9.20	A
55	ATOM	1267	CD	GLN	A	181	44.568	58.748	0.710	1.00	9.64	A
	ATOM	1268	OE1	GLN	A	181	44.834	59.035	1.884	1.00	10.23	A
	ATOM	1269	NE2	GLN	A	181	43.940	57.627	0.371	1.00	8.92	A
	ATOM	1270	C	GLN	A	181	47.591	58.379	0.474	1.00	8.83	A
	ATOM	1271	O	GLN	A	181	48.063	58.448	1.607	1.00	9.20	A

5	ATOM	1272	N	LEU	A	182	47.110	57.246	-0.035	1.00	8.67	A
	ATOM	1273	CA	LEU	A	182	47.155	56.012	0.743	1.00	8.95	A
	ATOM	1274	CB	LEU	A	182	46.432	54.871	0.011	1.00	8.61	A
	ATOM	1275	CG	LEU	A	182	46.498	53.481	0.664	1.00	8.86	A
	ATOM	1276	CD1	LEU	A	182	45.753	53.482	1.997	1.00	8.49	A
	ATOM	1277	CD2	LEU	A	182	45.889	52.443	-0.283	1.00	9.99	A
	ATOM	1278	C	LEU	A	182	48.626	55.642	0.933	1.00	9.47	A
	ATOM	1279	O	LEU	A	182	49.058	55.298	2.033	1.00	9.33	A
10	ATOM	1280	N	THR	A	183	49.395	55.737	-0.149	1.00	9.38	A
	ATOM	1281	CA	THR	A	183	50.815	55.407	-0.113	1.00	10.00	A
	ATOM	1282	CB	THR	A	183	51.440	55.484	-1.537	1.00	10.83	A
	ATOM	1283	OG1	THR	A	183	50.713	54.627	-2.430	1.00	9.77	A
15	ATOM	1284	CG2	THR	A	183	52.906	55.045	-1.506	1.00	11.31	A
	ATOM	1285	C	THR	A	183	51.570	56.352	0.825	1.00	10.11	A
	ATOM	1286	O	THR	A	183	52.438	55.923	1.595	1.00	9.89	A
	ATOM	1287	N	GLU	A	184	51.239	57.638	0.772	1.00	10.04	A
20	ATOM	1288	CA	GLU	A	184	51.914	58.613	1.624	1.00	10.88	A
	ATOM	1289	CB	GLU	A	184	51.370	60.019	1.345	1.00	11.50	A
	ATOM	1290	CG	GLU	A	184	52.226	61.167	1.881	1.00	12.25	A
	ATOM	1291	CD	GLU	A	184	53.620	61.223	1.262	1.00	13.15	A
	ATOM	1292	OE1	GLU	A	184	53.768	60.907	0.063	1.00	12.76	A
	ATOM	1293	OE2	GLU	A	184	54.568	61.607	1.977	1.00	13.95	A
25	ATOM	1294	C	GLU	A	184	51.714	58.248	3.099	1.00	10.59	A
	ATOM	1295	O	GLU	A	184	52.664	58.249	3.885	1.00	10.65	A
	ATOM	1296	N	GLY	A	185	50.479	57.922	3.463	1.00	10.39	A
	ATOM	1297	CA	GLY	A	185	50.182	57.557	4.839	1.00	10.33	A
	ATOM	1298	C	GLY	A	185	50.768	56.222	5.268	1.00	10.94	A
	ATOM	1299	O	GLY	A	185	51.355	56.110	6.351	1.00	9.76	A
30	ATOM	1300	N	GLN	A	186	50.622	55.200	4.430	1.00	10.45	A
	ATOM	1301	CA	GLN	A	186	51.144	53.884	4.788	1.00	11.43	A
	ATOM	1302	CB	GLN	A	186	50.560	52.803	3.874	1.00	11.23	A
	ATOM	1303	CG	GLN	A	186	49.047	52.623	4.010	1.00	12.83	A
	ATOM	1304	CD	GLN	A	186	48.618	51.182	3.793	1.00	13.65	A
	ATOM	1305	OE1	GLN	A	186	49.190	50.479	2.965	1.00	15.97	A
35	ATOM	1306	NE2	GLN	A	186	47.602	50.741	4.528	1.00	13.28	A
	ATOM	1307	C	GLN	A	186	52.668	53.800	4.781	1.00	11.78	A
	ATOM	1308	O	GLN	A	186	53.255	53.037	5.548	1.00	11.71	A
	ATOM	1309	N	THR	A	187	53.314	54.571	3.916	1.00	11.96	A
40	ATOM	1310	CA	THR	A	187	54.770	54.548	3.875	1.00	11.50	A
	ATOM	1311	CB	THR	A	187	55.300	55.350	2.672	1.00	11.86	A
	ATOM	1312	OG1	THR	A	187	54.843	54.733	1.460	1.00	10.52	A
	ATOM	1313	CG2	THR	A	187	56.829	55.372	2.666	1.00	10.99	A
45	ATOM	1314	C	THR	A	187	55.289	55.130	5.191	1.00	12.09	A
	ATOM	1315	O	THR	A	187	56.252	54.627	5.770	1.00	11.42	A
	ATOM	1316	N	TRP	A	188	54.632	56.180	5.674	1.00	12.12	A
	ATOM	1317	CA	TRP	A	188	55.033	56.792	6.936	1.00	12.70	A
	ATOM	1318	CB	TRP	A	188	54.184	58.034	7.236	1.00	13.41	A
	ATOM	1319	CG	TRP	A	188	54.647	58.790	8.456	1.00	14.39	A
50	ATOM	1320	CD2	TRP	A	188	54.293	58.517	9.818	1.00	14.53	A
	ATOM	1321	CE2	TRP	A	188	55.038	59.403	10.630	1.00	15.63	A
	ATOM	1322	CE3	TRP	A	188	53.423	57.606	10.431	1.00	14.76	A
	ATOM	1323	CD1	TRP	A	188	55.562	59.807	8.495	1.00	14.92	A
55	ATOM	1324	NE1	TRP	A	188	55.804	60.178	9.798	1.00	14.82	A
	ATOM	1325	CZ2	TRP	A	188	54.940	59.402	12.025	1.00	14.74	A
	ATOM	1326	CZ3	TRP	A	188	53.327	57.604	11.824	1.00	15.69	A

	ATOM	1327	CH2	TRP	A	188	54.081	58.497	12.602	1.00	15.84	A
	ATOM	1328	C	TRP	A	188	54.837	55.763	8.052	1.00	12.21	A
	ATOM	1329	O	TRP	A	188	55.725	55.555	8.875	1.00	12.03	A
5	ATOM	1330	N	LEU	A	189	53.672	55.116	8.071	1.00	12.09	A
	ATOM	1331	CA	LEU	A	189	53.375	54.112	9.091	1.00	12.32	A
	ATOM	1332	CB	LEU	A	189	51.966	53.538	8.896	1.00	11.84	A
	ATOM	1333	CG	LEU	A	189	50.798	54.434	9.314	1.00	11.10	A
	ATOM	1334	CD1	LEU	A	189	49.475	53.718	9.013	1.00	10.75	A
10	ATOM	1335	CD2	LEU	A	189	50.912	54.757	10.806	1.00	10.87	A
	ATOM	1336	C	LEU	A	189	54.376	52.962	9.111	1.00	12.67	A
	ATOM	1337	O	LEU	A	189	54.792	52.513	10.181	1.00	12.84	A
	ATOM	1338	N	LYS	A	190	54.757	52.473	7.936	1.00	12.75	A
	ATOM	1339	CA	LYS	A	190	55.709	51.370	7.882	1.00	15.02	A
15	ATOM	1340	CB	LYS	A	190	55.916	50.886	6.444	1.00	16.33	A
	ATOM	1341	CG	LYS	A	190	56.750	49.605	6.350	1.00	18.79	A
	ATOM	1342	CD	LYS	A	190	56.958	49.174	4.906	1.00	21.47	A
	ATOM	1343	CE	LYS	A	190	57.529	47.761	4.821	1.00	24.11	A
	ATOM	1344	NZ	LYS	A	190	58.713	47.598	5.708	1.00	26.25	A
20	ATOM	1345	C	LYS	A	190	57.052	51.793	8.464	1.00	15.60	A
	ATOM	1346	O	LYS	A	190	57.654	51.067	9.254	1.00	15.07	A
	ATOM	1347	N	GLN	A	191	57.514	52.974	8.075	1.00	16.02	A
	ATOM	1348	CA	GLN	A	191	58.794	53.477	8.548	1.00	17.78	A
	ATOM	1349	CB	GLN	A	191	59.199	54.722	7.750	1.00	19.02	A
25	ATOM	1350	CG	GLN	A	191	60.526	55.324	8.202	1.00	23.22	A
	ATOM	1351	CD	GLN	A	191	60.944	56.540	7.390	1.00	24.68	A
	ATOM	1352	OE1	GLN	A	191	61.989	57.140	7.651	1.00	27.33	A
	ATOM	1353	NE2	GLN	A	191	60.132	56.909	6.402	1.00	25.58	A
	ATOM	1354	C	GLN	A	191	58.848	53.800	10.041	1.00	17.91	A
30	ATOM	1355	O	GLN	A	191	59.810	53.434	10.717	1.00	18.33	A
	ATOM	1356	N	PHE	A	192	57.827	54.474	10.563	1.00	17.35	A
	ATOM	1357	CA	PHE	A	192	57.841	54.854	11.974	1.00	17.36	A
	ATOM	1358	CB	PHE	A	192	57.419	56.320	12.116	1.00	16.34	A
	ATOM	1359	CG	PHE	A	192	58.324	57.279	11.402	1.00	16.29	A
35	ATOM	1360	CD1	PHE	A	192	58.020	57.717	10.115	1.00	15.35	A
	ATOM	1361	CD2	PHE	A	192	59.495	57.726	12.004	1.00	16.10	A
	ATOM	1362	CE1	PHE	A	192	58.867	58.585	9.439	1.00	16.22	A
	ATOM	1363	CE2	PHE	A	192	60.354	58.598	11.334	1.00	17.05	A
	ATOM	1364	CZ	PHE	A	192	60.040	59.029	10.050	1.00	16.60	A
40	ATOM	1365	C	PHE	A	192	57.045	54.009	12.972	1.00	18.24	A
	ATOM	1366	O	PHE	A	192	57.395	53.972	14.154	1.00	18.88	A
	ATOM	1367	N	MET	A	193	55.989	53.340	12.519	1.00	17.95	A
	ATOM	1368	CA	MET	A	193	55.170	52.518	13.418	1.00	19.29	A
	ATOM	1369	CB	MET	A	193	53.684	52.877	13.282	1.00	20.31	A
45	ATOM	1370	CG	MET	A	193	53.272	54.222	13.862	1.00	21.04	A
	ATOM	1371	SD	MET	A	193	53.652	54.404	15.629	1.00	25.98	A
	ATOM	1372	CE	MET	A	193	54.978	55.547	15.464	1.00	22.14	A
	ATOM	1373	C	MET	A	193	55.336	51.022	13.153	1.00	19.68	A
	ATOM	1374	O	MET	A	193	54.858	50.189	13.928	1.00	18.38	A
50	ATOM	1375	N	ASN	A	194	56.001	50.693	12.050	1.00	20.20	A
	ATOM	1376	CA	ASN	A	194	56.234	49.306	11.662	1.00	22.12	A
	ATOM	1377	CB	ASN	A	194	57.165	48.627	12.676	1.00	26.86	A
	ATOM	1378	CG	ASN	A	194	57.617	47.247	12.225	1.00	32.79	A
	ATOM	1379	OD1	ASN	A	194	57.780	46.999	11.028	1.00	31.85	A
55	ATOM	1380	ND2	ASN	A	194	57.832	46.357	13.191	1.00	38.94	A
	ATOM	1381	C	ASN	A	194	54.929	48.517	11.534	1.00	20.58	A

5	ATOM	1382	O	ASN	A	194	54.833	47.373	11.978	1.00	19.15	A
	ATOM	1383	N	VAL	A	195	53.920	49.139	10.935	1.00	18.58	A
	ATOM	1384	CA	VAL	A	195	52.634	48.479	10.742	1.00	17.61	A
	ATOM	1385	CB	VAL	A	195	51.628	48.794	11.888	1.00	17.65	A
	ATOM	1386	CG1	VAL	A	195	52.173	48.301	13.227	1.00	19.15	A
10	ATOM	1387	CG2	VAL	A	195	51.342	50.288	11.941	1.00	18.14	A
	ATOM	1388	C	VAL	A	195	52.006	48.928	9.428	1.00	16.13	A
	ATOM	1389	O	VAL	A	195	52.232	50.051	8.975	1.00	15.25	A
	ATOM	1390	N	THR	A	196	51.229	48.034	8.825	1.00	14.72	A
	ATOM	1391	CA	THR	A	196	50.527	48.309	7.574	1.00	14.36	A
15	ATOM	1392	CB	THR	A	196	51.159	47.554	6.377	1.00	14.11	A
	ATOM	1393	OG1	THR	A	196	52.516	47.978	6.196	1.00	14.55	A
	ATOM	1394	CG2	THR	A	196	50.374	47.830	5.105	1.00	15.25	A
	ATOM	1395	C	THR	A	196	49.093	47.818	7.746	1.00	13.73	A
	ATOM	1396	O	THR	A	196	48.845	46.613	7.787	1.00	13.60	A
20	ATOM	1397	N	PRO	A	197	48.130	48.745	7.859	1.00	13.55	A
	ATOM	1398	CD	PRO	A	197	48.302	50.207	7.944	1.00	13.01	A
	ATOM	1399	CA	PRO	A	197	46.722	48.375	8.029	1.00	13.52	A
	ATOM	1400	CB	PRO	A	197	46.014	49.726	8.085	1.00	13.17	A
	ATOM	1401	CG	PRO	A	197	47.057	50.632	8.681	1.00	12.88	A
25	ATOM	1402	C	PRO	A	197	46.181	47.507	6.898	1.00	13.94	A
	ATOM	1403	O	PRO	A	197	46.536	47.699	5.733	1.00	13.93	A
	ATOM	1404	N	THR	A	198	45.335	46.542	7.249	1.00	13.37	A
	ATOM	1405	CA	THR	A	198	44.721	45.677	6.250	1.00	13.41	A
	ATOM	1406	CB	THR	A	198	45.065	44.185	6.457	1.00	13.58	A
30	ATOM	1407	OG1	THR	A	198	44.601	43.759	7.740	1.00	13.61	A
	ATOM	1408	CG2	THR	A	198	46.567	43.963	6.342	1.00	14.13	A
	ATOM	1409	C	THR	A	198	43.210	45.841	6.322	1.00	11.99	A
	ATOM	1410	O	THR	A	198	42.473	45.152	5.623	1.00	11.91	A
	ATOM	1411	N	ALA	A	199	42.760	46.757	7.179	1.00	11.92	A
35	ATOM	1412	CA	ALA	A	199	41.336	47.050	7.332	1.00	11.29	A
	ATOM	1413	CB	ALA	A	199	40.856	46.659	8.736	1.00	11.40	A
	ATOM	1414	C	ALA	A	199	41.110	48.547	7.092	1.00	11.77	A
	ATOM	1415	O	ALA	A	199	41.807	49.386	7.667	1.00	12.44	A
	ATOM	1416	N	SER	A	200	40.135	48.879	6.252	1.00	10.98	A
40	ATOM	1417	CA	SER	A	200	39.844	50.276	5.937	1.00	11.61	A
	ATOM	1418	CB	SER	A	200	39.680	50.459	4.426	1.00	11.69	A
	ATOM	1419	OG	SER	A	200	39.531	51.830	4.097	1.00	12.70	A
	ATOM	1420	C	SER	A	200	38.607	50.795	6.658	1.00	11.42	A
	ATOM	1421	O	SER	A	200	37.635	50.057	6.871	1.00	11.38	A
45	ATOM	1422	N	TRP	A	201	38.654	52.077	7.008	1.00	10.70	A
	ATOM	1423	CA	TRP	A	201	37.592	52.759	7.745	1.00	11.31	A
	ATOM	1424	CB	TRP	A	201	38.110	52.997	9.176	1.00	11.10	A
	ATOM	1425	CG	TRP	A	201	37.296	53.856	10.113	1.00	12.37	A
	ATOM	1426	CD2	TRP	A	201	36.309	53.406	11.051	1.00	12.43	A
50	ATOM	1427	CE2	TRP	A	201	35.917	54.529	11.819	1.00	13.19	A
	ATOM	1428	CE3	TRP	A	201	35.722	52.162	11.322	1.00	13.10	A
	ATOM	1429	CD1	TRP	A	201	37.448	55.199	10.338	1.00	12.79	A
	ATOM	1430	NE1	TRP	A	201	36.627	55.608	11.361	1.00	12.52	A
	ATOM	1431	CZ2	TRP	A	201	34.964	54.444	12.841	1.00	12.77	A
55	ATOM	1432	CZ3	TRP	A	201	34.772	52.077	12.344	1.00	13.70	A
	ATOM	1433	CH2	TRP	A	201	34.405	53.215	13.089	1.00	13.30	A
	ATOM	1434	C	TRP	A	201	37.225	54.074	7.040	1.00	11.37	A
	ATOM	1435	O	TRP	A	201	37.995	55.031	7.058	1.00	12.26	A
	ATOM	1436	N	ALA	A	202	36.053	54.102	6.408	1.00	11.54	A

5	ATOM	1437	CA	ALA	A	202	35.578	55.285	5.686	1.00	11.82	A
	ATOM	1438	CB	ALA	A	202	35.620	55.026	4.180	1.00	12.16	A
	ATOM	1439	C	ALA	A	202	34.152	55.613	6.129	1.00	11.83	A
	ATOM	1440	O	ALA	A	202	33.184	55.165	5.519	1.00	11.26	A
	ATOM	1441	N	ILE	A	203	34.039	56.420	7.181	1.00	11.80	A
10	ATOM	1442	CA	ILE	A	203	32.747	56.774	7.762	1.00	11.97	A
	ATOM	1443	CB	ILE	A	203	32.830	56.770	9.311	1.00	12.02	A
	ATOM	1444	CG2	ILE	A	203	33.134	55.350	9.821	1.00	12.31	A
	ATOM	1445	CG1	ILE	A	203	33.914	57.756	9.772	1.00	12.87	A
	ATOM	1446	CD1	ILE	A	203	33.998	57.941	11.286	1.00	13.55	A
15	ATOM	1447	C	ILE	A	203	32.115	58.101	7.347	1.00	11.95	A
	ATOM	1448	O	ILE	A	203	30.937	58.324	7.633	1.00	11.82	A
	ATOM	1449	N	ASP	A	204	32.861	58.978	6.677	1.00	11.66	A
	ATOM	1450	CA	ASP	A	204	32.278	60.269	6.305	1.00	12.21	A
	ATOM	1451	CB	ASP	A	204	32.986	61.406	7.053	1.00	11.72	A
20	ATOM	1452	CG	ASP	A	204	32.058	62.589	7.336	1.00	11.97	A
	ATOM	1453	OD1	ASP	A	204	32.557	63.712	7.559	1.00	12.03	A
	ATOM	1454	OD2	ASP	A	204	30.823	62.401	7.351	1.00	11.68	A
	ATOM	1455	C	ASP	A	204	32.162	60.651	4.824	1.00	12.19	A
	ATOM	1456	O	ASP	A	204	31.420	61.580	4.496	1.00	12.41	A
25	ATOM	1457	N	PRO	A	205	32.888	59.969	3.911	1.00	12.60	A
	ATOM	1458	CD	PRO	A	205	33.888	58.895	4.047	1.00	12.94	A
	ATOM	1459	CA	PRO	A	205	32.739	60.366	2.500	1.00	12.61	A
	ATOM	1460	CB	PRO	A	205	33.573	59.323	1.758	1.00	12.97	A
	ATOM	1461	CG	PRO	A	205	34.666	59.017	2.747	1.00	13.56	A
30	ATOM	1462	C	PRO	A	205	31.257	60.328	2.109	1.00	12.65	A
	ATOM	1463	O	PRO	A	205	30.520	59.451	2.557	1.00	13.12	A
	ATOM	1464	N	PHE	A	206	30.828	61.266	1.267	1.00	12.48	A
	ATOM	1465	CA	PHE	A	206	29.418	61.367	0.872	1.00	11.65	A
	ATOM	1466	CB	PHE	A	206	29.094	62.829	0.542	1.00	10.97	A
35	ATOM	1467	CG	PHE	A	206	29.933	63.823	1.310	1.00	11.31	A
	ATOM	1468	CD1	PHE	A	206	30.170	63.652	2.673	1.00	10.59	A
	ATOM	1469	CD2	PHE	A	206	30.497	64.926	0.668	1.00	11.93	A
	ATOM	1470	CE1	PHE	A	206	30.957	64.559	3.385	1.00	10.69	A
	ATOM	1471	CE2	PHE	A	206	31.286	65.842	1.372	1.00	11.78	A
40	ATOM	1472	CZ	PHE	A	206	31.518	65.656	2.734	1.00	10.49	A
	ATOM	1473	C	PHE	A	206	29.064	60.456	-0.306	1.00	11.76	A
	ATOM	1474	O	PHE	A	206	28.869	60.914	-1.431	1.00	11.63	A
	ATOM	1475	N	GLY	A	207	28.946	59.164	-0.017	1.00	11.94	A
	ATOM	1476	CA	GLY	A	207	28.677	58.182	-1.053	1.00	11.86	A
45	ATOM	1477	C	GLY	A	207	29.978	57.409	-1.186	1.00	11.58	A
	ATOM	1478	O	GLY	A	207	31.034	57.942	-0.840	1.00	11.47	A
	ATOM	1479	N	HIS	A	208	29.922	56.173	-1.681	1.00	11.57	A
	ATOM	1480	CA	HIS	A	208	31.125	55.351	-1.800	1.00	11.22	A
	ATOM	1481	CB	HIS	A	208	31.074	54.238	-0.753	1.00	11.82	A
50	ATOM	1482	CG	HIS	A	208	31.157	54.741	0.654	1.00	12.72	A
	ATOM	1483	CD2	HIS	A	208	30.195	54.971	1.578	1.00	12.86	A
	ATOM	1484	ND1	HIS	A	208	32.349	55.099	1.245	1.00	13.33	A
	ATOM	1485	CE1	HIS	A	208	32.118	55.527	2.473	1.00	13.14	A
	ATOM	1486	NE2	HIS	A	208	30.819	55.460	2.700	1.00	12.64	A
55	ATOM	1487	C	HIS	A	208	31.364	54.757	-3.181	1.00	10.90	A
	ATOM	1488	O	HIS	A	208	30.421	54.409	-3.899	1.00	11.18	A
	ATOM	1489	N	SER	A	209	32.638	54.629	-3.536	1.00	10.51	A
	ATOM	1490	CA	SER	A	209	33.037	54.107	-4.841	1.00	10.62	A
	ATOM	1491	CB	SER	A	209	33.915	55.137	-5.554	1.00	10.69	A

5	ATOM	1492	OG	SER	A	209	34.484	54.588	-6.735	1.00	11.16	A
	ATOM	1493	C	SER	A	209	33.795	52.783	-4.783	1.00	10.51	A
	ATOM	1494	O	SER	A	209	34.600	52.561	-3.875	1.00	9.87	A
	ATOM	1495	N	PRO	A	210	33.550	51.890	-5.762	1.00	10.42	A
	ATOM	1496	CD	PRO	A	210	32.556	52.009	-6.845	1.00	10.36	A
10	ATOM	1497	CA	PRO	A	210	34.222	50.589	-5.820	1.00	10.49	A
	ATOM	1498	CB	PRO	A	210	33.452	49.846	-6.910	1.00	10.13	A
	ATOM	1499	CG	PRO	A	210	33.024	50.951	-7.828	1.00	10.41	A
	ATOM	1500	C	PRO	A	210	35.705	50.759	-6.147	1.00	10.64	A
	ATOM	1501	O	PRO	A	210	36.481	49.808	-6.066	1.00	10.74	A
15	ATOM	1502	N	THR	A	211	36.103	51.972	-6.523	1.00	9.89	A
	ATOM	1503	CA	THR	A	211	37.514	52.211	-6.792	1.00	10.11	A
	ATOM	1504	CB	THR	A	211	37.772	53.661	-7.261	1.00	9.96	A
	ATOM	1505	OG1	THR	A	211	37.237	53.833	-8.578	1.00	9.80	A
	ATOM	1506	CG2	THR	A	211	39.270	53.961	-7.287	1.00	9.72	A
20	ATOM	1507	C	THR	A	211	38.309	51.956	-5.504	1.00	9.81	A
	ATOM	1508	O	THR	A	211	39.479	51.571	-5.552	1.00	9.54	A
	ATOM	1509	N	MET	A	212	37.672	52.156	-4.353	1.00	10.26	A
	ATOM	1510	CA	MET	A	212	38.360	51.942	-3.080	1.00	10.69	A
	ATOM	1511	CB	MET	A	212	37.514	52.455	-1.909	1.00	11.51	A
25	ATOM	1512	CG	MET	A	212	37.207	53.947	-1.963	1.00	13.25	A
	ATOM	1513	SD	MET	A	212	38.667	54.999	-2.246	1.00	15.34	A
	ATOM	1514	CE	MET	A	212	39.457	54.946	-0.633	1.00	14.30	A
	ATOM	1515	C	MET	A	212	38.741	50.471	-2.866	1.00	10.61	A
	ATOM	1516	O	MET	A	212	39.909	50.159	-2.623	1.00	10.52	A
30	ATOM	1517	N	PRO	A	213	37.767	49.546	-2.935	1.00	10.33	A
	ATOM	1518	CD	PRO	A	213	36.300	49.654	-3.018	1.00	10.77	A
	ATOM	1519	CA	PRO	A	213	38.185	48.152	-2.736	1.00	10.25	A
	ATOM	1520	CB	PRO	A	213	36.858	47.377	-2.754	1.00	10.19	A
	ATOM	1521	CG	PRO	A	213	35.918	48.291	-3.533	1.00	10.86	A
35	ATOM	1522	C	PRO	A	213	39.166	47.707	-3.824	1.00	10.35	A
	ATOM	1523	O	PRO	A	213	40.033	46.865	-3.586	1.00	10.07	A
	ATOM	1524	N	TYR	A	214	39.032	48.277	-5.021	1.00	10.06	A
	ATOM	1525	CA	TYR	A	214	39.937	47.944	-6.120	1.00	10.18	A
	ATOM	1526	CB	TYR	A	214	39.619	48.786	-7.349	1.00	10.58	A
40	ATOM	1527	CG	TYR	A	214	40.546	48.531	-8.519	1.00	11.85	A
	ATOM	1528	CD1	TYR	A	214	40.376	47.416	-9.343	1.00	12.70	A
	ATOM	1529	CE1	TYR	A	214	41.207	47.203	-10.446	1.00	13.49	A
	ATOM	1530	CD2	TYR	A	214	41.575	49.420	-8.820	1.00	11.15	A
	ATOM	1531	CE2	TYR	A	214	42.410	49.215	-9.914	1.00	11.99	A
45	ATOM	1532	CZ	TYR	A	214	42.220	48.111	-10.726	1.00	12.95	A
	ATOM	1533	OH	TYR	A	214	43.022	47.940	-11.836	1.00	13.94	A
	ATOM	1534	C	TYR	A	214	41.384	48.213	-5.705	1.00	10.67	A
	ATOM	1535	O	TYR	A	214	42.252	47.341	-5.808	1.00	10.14	A
	ATOM	1536	N	ILE	A	215	41.634	49.435	-5.242	1.00	10.04	A
50	ATOM	1537	CA	ILE	A	215	42.965	49.848	-4.809	1.00	10.06	A
	ATOM	1538	CB	ILE	A	215	43.005	51.384	-4.572	1.00	10.31	A
	ATOM	1539	CG2	ILE	A	215	44.348	51.795	-3.971	1.00	10.36	A
	ATOM	1540	CG1	ILE	A	215	42.745	52.119	-5.890	1.00	11.37	A
	ATOM	1541	CD1	ILE	A	215	42.716	53.640	-5.753	1.00	12.28	A
55	ATOM	1542	C	ILE	A	215	43.399	49.135	-3.523	1.00	10.17	A
	ATOM	1543	O	ILE	A	215	44.529	48.659	-3.413	1.00	9.97	A
	ATOM	1544	N	LEU	A	216	42.497	49.061	-2.552	1.00	10.00	A
	ATOM	1545	CA	LEU	A	216	42.810	48.418	-1.277	1.00	9.82	A
	ATOM	1546	CB	LEU	A	216	41.638	48.595	-0.303	1.00	9.65	A

5	ATOM	1547	CG	LEU	A	216	41.248	50.040	0.047	1.00	10.00	A
	ATOM	1548	CD1	LEU	A	216	39.930	50.050	0.812	1.00	9.64	A
	ATOM	1549	CD2	LEU	A	216	42.361	50.692	0.874	1.00	11.22	A
	ATOM	1550	C	LEU	A	216	43.145	46.929	-1.417	1.00	10.48	A
	ATOM	1551	O	LEU	A	216	44.115	46.449	-0.825	1.00	9.64	A
10	ATOM	1552	N	GLN	A	217	42.344	46.204	-2.195	1.00	10.39	A
	ATOM	1553	CA	GLN	A	217	42.565	44.773	-2.385	1.00	11.31	A
	ATOM	1554	CB	GLN	A	217	41.417	44.187	-3.216	1.00	13.02	A
	ATOM	1555	CG	GLN	A	217	41.367	42.662	-3.309	1.00	13.54	A
	ATOM	1556	CD	GLN	A	217	42.291	42.117	-4.371	1.00	14.73	A
15	ATOM	1557	OE1	GLN	A	217	42.492	42.749	-5.406	1.00	16.14	A
	ATOM	1558	NE2	GLN	A	217	42.849	40.934	-4.131	1.00	14.69	A
	ATOM	1559	C	GLN	A	217	43.922	44.529	-3.050	1.00	11.72	A
	ATOM	1560	O	GLN	A	217	44.561	43.499	-2.824	1.00	11.92	A
	ATOM	1561	N	LYS	A	218	44.365	45.491	-3.857	1.00	11.23	A
20	ATOM	1562	CA	LYS	A	218	45.655	45.397	-4.537	1.00	11.32	A
	ATOM	1563	CB	LYS	A	218	45.589	46.102	-5.899	1.00	11.09	A
	ATOM	1564	CG	LYS	A	218	44.804	45.324	-6.959	1.00	12.02	A
	ATOM	1565	CD	LYS	A	218	44.608	46.141	-8.238	1.00	11.87	A
	ATOM	1566	CE	LYS	A	218	44.232	45.257	-9.421	1.00	12.02	A
25	ATOM	1567	NZ	LYS	A	218	43.101	44.326	-9.148	1.00	12.06	A
	ATOM	1568	C	LYS	A	218	46.762	46.019	-3.679	1.00	11.45	A
	ATOM	1569	O	LYS	A	218	47.904	46.154	-4.118	1.00	11.78	A
	ATOM	1570	N	SER	A	219	46.412	46.397	-2.453	1.00	10.93	A
	ATOM	1571	CA	SER	A	219	47.372	46.993	-1.533	1.00	11.29	A
30	ATOM	1572	CB	SER	A	219	47.014	48.460	-1.264	1.00	10.87	A
	ATOM	1573	OG	SER	A	219	47.094	49.223	-2.459	1.00	10.59	A
	ATOM	1574	C	SER	A	219	47.434	46.213	-0.219	1.00	11.22	A
	ATOM	1575	O	SER	A	219	47.748	46.768	0.836	1.00	10.76	A
	ATOM	1576	N	GLY	A	220	47.118	44.922	-0.296	1.00	11.64	A
35	ATOM	1577	CA	GLY	A	220	47.176	44.066	0.878	1.00	12.01	A
	ATOM	1578	C	GLY	A	220	45.984	44.042	1.820	1.00	12.11	A
	ATOM	1579	O	GLY	A	220	45.995	43.298	2.801	1.00	12.08	A
	ATOM	1580	N	PHE	A	221	44.947	44.825	1.541	1.00	12.32	A
	ATOM	1581	CA	PHE	A	221	43.794	44.844	2.435	1.00	11.98	A
40	ATOM	1582	CB	PHE	A	221	42.909	46.065	2.168	1.00	12.08	A
	ATOM	1583	CG	PHE	A	221	43.466	47.344	2.716	1.00	11.83	A
	ATOM	1584	CD1	PHE	A	221	44.586	47.935	2.139	1.00	10.91	A
	ATOM	1585	CD2	PHE	A	221	42.876	47.955	3.816	1.00	11.28	A
	ATOM	1586	CE1	PHE	A	221	45.111	49.121	2.651	1.00	10.48	A
45	ATOM	1587	CE2	PHE	A	221	43.394	49.145	4.338	1.00	10.77	A
	ATOM	1588	CZ	PHE	A	221	44.514	49.727	3.752	1.00	10.54	A
	ATOM	1589	C	PHE	A	221	42.939	43.593	2.363	1.00	12.33	A
	ATOM	1590	O	PHE	A	221	42.892	42.913	1.341	1.00	12.04	A
	ATOM	1591	N	LYS	A	222	42.257	43.305	3.466	1.00	12.92	A
50	ATOM	1592	CA	LYS	A	222	41.385	42.147	3.546	1.00	14.09	A
	ATOM	1593	CB	LYS	A	222	41.966	41.125	4.523	1.00	16.83	A
	ATOM	1594	CG	LYS	A	222	43.173	40.401	3.950	1.00	20.43	A
	ATOM	1595	CD	LYS	A	222	43.793	39.446	4.945	1.00	24.43	A
	ATOM	1596	CE	LYS	A	222	44.802	38.537	4.250	1.00	25.85	A
55	ATOM	1597	NZ	LYS	A	222	45.771	39.315	3.420	1.00	27.78	A
	ATOM	1598	C	LYS	A	222	39.974	42.533	3.966	1.00	13.76	A
	ATOM	1599	O	LYS	A	222	39.043	41.745	3.804	1.00	12.76	A
	ATOM	1600	N	ASN	A	223	39.819	43.747	4.492	1.00	12.50	A
	ATOM	1601	CA	ASN	A	223	38.512	44.224	4.940	1.00	12.54	A

5	ATOM	1602	CB	ASN	A	223	38.274	43.836	6.404	1.00	12.58	A
	ATOM	1603	CG	ASN	A	223	38.364	42.345	6.641	1.00	13.38	A
	ATOM	1604	OD1	ASN	A	223	39.396	41.832	7.092	1.00	14.56	A
	ATOM	1605	ND2	ASN	A	223	37.286	41.637	6.336	1.00	10.53	A
	ATOM	1606	C	ASN	A	223	38.345	45.738	4.826	1.00	11.96	A
10	ATOM	1607	O	ASN	A	223	39.318	46.485	4.891	1.00	11.78	A
	ATOM	1608	N	MET	A	224	37.101	46.183	4.668	1.00	12.00	A
	ATOM	1609	CA	MET	A	224	36.800	47.609	4.598	1.00	12.07	A
	ATOM	1610	CB	MET	A	224	36.915	48.134	3.165	1.00	12.02	A
	ATOM	1611	CG	MET	A	224	35.849	47.631	2.207	1.00	12.35	A
15	ATOM	1612	SD	MET	A	224	36.063	48.400	0.596	1.00	12.43	A
	ATOM	1613	CE	MET	A	224	35.436	50.044	0.920	1.00	12.22	A
	ATOM	1614	C	MET	A	224	35.402	47.892	5.142	1.00	12.41	A
	ATOM	1615	O	MET	A	224	34.516	47.029	5.113	1.00	11.89	A
	ATOM	1616	N	LEU	A	225	35.221	49.106	5.649	1.00	11.22	A
20	ATOM	1617	CA	LEU	A	225	33.950	49.530	6.219	1.00	11.40	A
	ATOM	1618	CB	LEU	A	225	34.090	49.648	7.738	1.00	10.91	A
	ATOM	1619	CG	LEU	A	225	32.929	50.260	8.531	1.00	11.65	A
	ATOM	1620	CD1	LEU	A	225	32.932	49.685	9.935	1.00	11.52	A
	ATOM	1621	CD2	LEU	A	225	33.046	51.798	8.559	1.00	11.31	A
25	ATOM	1622	C	LEU	A	225	33.525	50.868	5.626	1.00	11.04	A
	ATOM	1623	O	LEU	A	225	34.351	51.762	5.451	1.00	10.88	A
	ATOM	1624	N	ILE	A	226	32.237	50.997	5.315	1.00	11.47	A
	ATOM	1625	CA	ILE	A	226	31.699	52.232	4.747	1.00	11.81	A
	ATOM	1626	CB	ILE	A	226	31.371	52.059	3.242	1.00	11.66	A
30	ATOM	1627	CG2	ILE	A	226	32.645	51.699	2.478	1.00	11.16	A
	ATOM	1628	CG1	ILE	A	226	30.315	50.968	3.048	1.00	11.34	A
	ATOM	1629	CD1	ILE	A	226	29.894	50.771	1.596	1.00	11.84	A
	ATOM	1630	C	ILE	A	226	30.441	52.632	5.516	1.00	12.31	A
	ATOM	1631	O	ILE	A	226	29.856	51.805	6.222	1.00	12.85	A
35	ATOM	1632	N	GLN	A	227	30.020	53.888	5.381	1.00	12.34	A
	ATOM	1633	CA	GLN	A	227	28.853	54.367	6.118	1.00	12.23	A
	ATOM	1634	CB	GLN	A	227	29.334	55.170	7.334	1.00	12.52	A
	ATOM	1635	CG	GLN	A	227	28.376	56.253	7.845	1.00	12.98	A
	ATOM	1636	CD	GLN	A	227	27.053	55.713	8.357	1.00	13.37	A
40	ATOM	1637	OE1	GLN	A	227	26.951	54.552	8.753	1.00	14.02	A
	ATOM	1638	NE2	GLN	A	227	26.034	56.568	8.375	1.00	12.44	A
	ATOM	1639	C	GLN	A	227	27.814	55.187	5.351	1.00	12.86	A
	ATOM	1640	O	GLN	A	227	26.618	54.888	5.408	1.00	12.43	A
	ATOM	1641	N	ARG	A	228	28.252	56.225	4.645	1.00	12.28	A
45	ATOM	1642	CA	ARG	A	228	27.303	57.070	3.941	1.00	12.28	A
	ATOM	1643	CB	ARG	A	228	27.893	58.470	3.726	1.00	12.59	A
	ATOM	1644	CG	ARG	A	228	28.063	59.258	5.022	1.00	12.49	A
	ATOM	1645	CD	ARG	A	228	28.404	60.729	4.772	1.00	12.20	A
	ATOM	1646	NE	ARG	A	228	28.640	61.461	6.022	1.00	12.35	A
50	ATOM	1647	CZ	ARG	A	228	27.683	61.920	6.828	1.00	14.14	A
	ATOM	1648	NH1	ARG	A	228	26.400	61.736	6.525	1.00	14.04	A
	ATOM	1649	NH2	ARG	A	228	28.007	62.554	7.951	1.00	13.35	A
	ATOM	1650	C	ARG	A	228	26.759	56.523	2.628	1.00	12.67	A
	ATOM	1651	O	ARG	A	228	27.323	56.744	1.557	1.00	12.03	A
55	ATOM	1652	N	THR	A	229	25.653	55.795	2.735	1.00	12.60	A
	ATOM	1653	CA	THR	A	229	24.976	55.240	1.573	1.00	12.10	A
	ATOM	1654	CB	THR	A	229	25.136	53.695	1.490	1.00	12.81	A
	ATOM	1655	OG1	THR	A	229	24.559	53.075	2.648	1.00	12.19	A
	ATOM	1656	CG2	THR	A	229	26.617	53.324	1.405	1.00	11.20	A

5	ATOM	1657	C	THR	A	229	23.506	55.619	1.729	1.00	12.60	A
	ATOM	1658	O	THR	A	229	23.035	55.849	2.848	1.00	13.73	A
	ATOM	1659	N	HIS	A	230	22.796	55.701	0.608	1.00	12.44	A
	ATOM	1660	CA	HIS	A	230	21.380	56.080	0.589	1.00	12.74	A
	ATOM	1661	CB	HIS	A	230	20.803	55.794	-0.803	1.00	13.25	A
10	ATOM	1662	CG	HIS	A	230	19.545	56.546	-1.111	1.00	13.82	A
	ATOM	1663	CD2	HIS	A	230	19.268	57.462	-2.070	1.00	14.52	A
	ATOM	1664	ND1	HIS	A	230	18.382	56.384	-0.389	1.00	13.28	A
	ATOM	1665	CE1	HIS	A	230	17.443	57.169	-0.889	1.00	13.41	A
	ATOM	1666	NE2	HIS	A	230	17.954	57.834	-1.910	1.00	12.86	A
15	ATOM	1667	C	HIS	A	230	20.570	55.343	1.656	1.00	12.53	A
	ATOM	1668	O	HIS	A	230	20.672	54.125	1.788	1.00	12.07	A
	ATOM	1669	N	TYR	A	231	19.756	56.080	2.413	1.00	12.70	A
	ATOM	1670	CA	TYR	A	231	18.958	55.453	3.463	1.00	13.53	A
	ATOM	1671	CB	TYR	A	231	18.105	56.499	4.200	1.00	13.42	A
20	ATOM	1672	CG	TYR	A	231	17.122	57.268	3.337	1.00	14.84	A
	ATOM	1673	CD1	TYR	A	231	15.840	56.772	3.088	1.00	14.12	A
	ATOM	1674	CE1	TYR	A	231	14.934	57.484	2.305	1.00	14.51	A
	ATOM	1675	CD2	TYR	A	231	17.474	58.500	2.776	1.00	14.31	A
	ATOM	1676	CE2	TYR	A	231	16.576	59.217	1.992	1.00	14.26	A
25	ATOM	1677	CZ	TYR	A	231	15.308	58.704	1.761	1.00	14.26	A
	ATOM	1678	OH	TYR	A	231	14.421	59.409	0.982	1.00	14.93	A
	ATOM	1679	C	TYR	A	231	18.081	54.316	2.936	1.00	14.05	A
	ATOM	1680	O	TYR	A	231	17.785	53.368	3.661	1.00	14.36	A
	ATOM	1681	N	SER	A	232	17.675	54.399	1.674	1.00	14.47	A
30	ATOM	1682	CA	SER	A	232	16.847	53.348	1.086	1.00	15.06	A
	ATOM	1683	CB	SER	A	232	16.235	53.823	-0.233	1.00	15.79	A
	ATOM	1684	OG	SER	A	232	15.246	54.811	-0.004	1.00	17.41	A
	ATOM	1685	C	SER	A	232	17.650	52.071	0.854	1.00	14.95	A
	ATOM	1686	O	SER	A	232	17.120	50.966	0.967	1.00	13.88	A
35	ATOM	1687	N	VAL	A	233	18.931	52.229	0.529	1.00	14.34	A
	ATOM	1688	CA	VAL	A	233	19.807	51.085	0.295	1.00	13.73	A
	ATOM	1689	CB	VAL	A	233	21.136	51.534	-0.355	1.00	13.36	A
	ATOM	1690	CG1	VAL	A	233	22.122	50.372	-0.397	1.00	13.01	A
	ATOM	1691	CG2	VAL	A	233	20.868	52.043	-1.769	1.00	13.28	A
40	ATOM	1692	C	VAL	A	233	20.091	50.364	1.616	1.00	13.86	A
	ATOM	1693	O	VAL	A	233	20.086	49.131	1.679	1.00	13.64	A
	ATOM	1694	N	LYS	A	234	20.329	51.137	2.668	1.00	13.48	A
	ATOM	1695	CA	LYS	A	234	20.583	50.569	3.987	1.00	14.03	A
	ATOM	1696	CB	LYS	A	234	20.800	51.689	5.013	1.00	14.30	A
45	ATOM	1697	CG	LYS	A	234	22.142	52.414	4.890	1.00	14.69	A
	ATOM	1698	CD	LYS	A	234	22.193	53.642	5.799	1.00	13.66	A
	ATOM	1699	CE	LYS	A	234	23.563	54.329	5.762	1.00	13.23	A
	ATOM	1700	NZ	LYS	A	234	24.575	53.699	6.669	1.00	12.68	A
	ATOM	1701	C	LYS	A	234	19.392	49.706	4.405	1.00	14.10	A
50	ATOM	1702	O	LYS	A	234	19.563	48.582	4.877	1.00	13.22	A
	ATOM	1703	N	LYS	A	235	18.186	50.233	4.218	1.00	15.31	A
	ATOM	1704	CA	LYS	A	235	16.973	49.502	4.584	1.00	16.19	A
	ATOM	1705	CB	LYS	A	235	15.739	50.378	4.359	1.00	17.38	A
	ATOM	1706	CG	LYS	A	235	14.446	49.778	4.897	1.00	17.88	A
55	ATOM	1707	CD	LYS	A	235	13.270	50.694	4.617	1.00	18.37	A
	ATOM	1708	CE	LYS	A	235	11.979	50.115	5.171	1.00	20.00	A
	ATOM	1709	NZ	LYS	A	235	10.809	50.963	4.811	1.00	20.45	A
	ATOM	1710	C	LYS	A	235	16.846	48.212	3.780	1.00	16.38	A
	ATOM	1711	O	LYS	A	235	16.594	47.143	4.339	1.00	16.89	A

5	ATOM	1712	N	GLU	A	236	17.031	48.314	2.469	1.00	17.01	A
	ATOM	1713	CA	GLU	A	236	16.933	47.157	1.583	1.00	17.20	A
	ATOM	1714	CB	GLU	A	236	17.130	47.599	0.129	1.00	19.36	A
	ATOM	1715	CG	GLU	A	236	16.943	46.487	-0.894	1.00	22.75	A
	ATOM	1716	CD	GLU	A	236	15.493	46.037	-1.033	1.00	24.36	A
	ATOM	1717	OE1	GLU	A	236	15.237	45.125	-1.844	1.00	26.15	A
	ATOM	1718	OE2	GLU	A	236	14.610	46.592	-0.341	1.00	25.45	A
	ATOM	1719	C	GLU	A	236	17.946	46.063	1.931	1.00	16.81	A
10	ATOM	1720	O	GLU	A	236	17.585	44.895	2.078	1.00	16.28	A
	ATOM	1721	N	LEU	A	237	19.216	46.433	2.064	1.00	15.97	A
	ATOM	1722	CA	LEU	A	237	20.238	45.447	2.387	1.00	15.97	A
	ATOM	1723	CB	LEU	A	237	21.635	46.048	2.220	1.00	15.23	A
15	ATOM	1724	CG	LEU	A	237	21.976	46.514	0.799	1.00	15.74	A
	ATOM	1725	CD1	LEU	A	237	23.356	47.142	0.797	1.00	16.24	A
	ATOM	1726	CD2	LEU	A	237	21.919	45.337	-0.173	1.00	16.31	A
	ATOM	1727	C	LEU	A	237	20.066	44.898	3.800	1.00	15.86	A
	ATOM	1728	O	LEU	A	237	20.324	43.719	4.047	1.00	16.07	A
20	ATOM	1729	N	ALA	A	238	19.624	45.743	4.725	1.00	15.71	A
	ATOM	1730	CA	ALA	A	238	19.420	45.302	6.099	1.00	16.72	A
	ATOM	1731	CB	ALA	A	238	18.976	46.473	6.968	1.00	14.76	A
	ATOM	1732	C	ALA	A	238	18.373	44.187	6.149	1.00	17.50	A
	ATOM	1733	O	ALA	A	238	18.559	43.177	6.832	1.00	17.31	A
	ATOM	1734	N	GLN	A	239	17.279	44.374	5.418	1.00	18.24	A
25	ATOM	1735	CA	GLN	A	239	16.199	43.391	5.394	1.00	19.52	A
	ATOM	1736	CB	GLN	A	239	15.031	43.915	4.550	1.00	20.50	A
	ATOM	1737	CG	GLN	A	239	14.442	45.225	5.068	1.00	23.60	A
	ATOM	1738	CD	GLN	A	239	13.275	45.728	4.235	1.00	25.24	A
	ATOM	1739	OE1	GLN	A	239	13.364	45.819	3.009	1.00	27.04	A
30	ATOM	1740	NE2	GLN	A	239	12.175	46.069	4.900	1.00	27.03	A
	ATOM	1741	C	GLN	A	239	16.652	42.028	4.872	1.00	19.61	A
	ATOM	1742	O	GLN	A	239	16.080	41.000	5.230	1.00	19.90	A
	ATOM	1743	N	GLN	A	240	17.679	42.018	4.029	1.00	19.18	A
	ATOM	1744	CA	GLN	A	240	18.189	40.768	3.472	1.00	18.91	A
35	ATOM	1745	CB	GLN	A	240	18.421	40.927	1.969	1.00	21.14	A
	ATOM	1746	CG	GLN	A	240	17.200	41.421	1.212	1.00	23.97	A
	ATOM	1747	CD	GLN	A	240	16.065	40.422	1.230	1.00	25.55	A
	ATOM	1748	OE1	GLN	A	240	14.910	40.777	0.998	1.00	28.30	A
	ATOM	1749	NE2	GLN	A	240	16.387	39.160	1.494	1.00	26.14	A
40	ATOM	1750	C	GLN	A	240	19.495	40.350	4.139	1.00	17.92	A
	ATOM	1751	O	GLN	A	240	20.113	39.364	3.737	1.00	16.97	A
	ATOM	1752	N	ARG	A	241	19.895	41.090	5.171	1.00	16.88	A
	ATOM	1753	CA	ARG	A	241	21.149	40.831	5.871	1.00	16.09	A
45	ATOM	1754	CB	ARG	A	241	21.084	39.521	6.668	1.00	17.31	A
	ATOM	1755	CG	ARG	A	241	20.052	39.549	7.792	1.00	18.25	A
	ATOM	1756	CD	ARG	A	241	20.258	38.407	8.776	1.00	19.71	A
	ATOM	1757	NE	ARG	A	241	20.252	37.106	8.114	1.00	21.50	A
	ATOM	1758	CZ	ARG	A	241	20.610	35.966	8.700	1.00	23.01	A
	ATOM	1759	NH1	ARG	A	241	21.004	35.962	9.969	1.00	23.30	A
50	ATOM	1760	NH2	ARG	A	241	20.583	34.831	8.014	1.00	23.18	A
	ATOM	1761	C	ARG	A	241	22.284	40.784	4.853	1.00	15.76	A
	ATOM	1762	O	ARG	A	241	23.092	39.850	4.824	1.00	14.26	A
	ATOM	1763	N	GLN	A	242	22.327	41.807	4.004	1.00	15.05	A
55	ATOM	1764	CA	GLN	A	242	23.360	41.912	2.979	1.00	14.63	A
	ATOM	1765	CB	GLN	A	242	22.721	41.946	1.584	1.00	14.76	A
	ATOM	1766	CG	GLN	A	242	21.909	40.704	1.233	1.00	15.30	A

5	ATOM	1767	CD	GLN	A	242	21.188	40.836	-0.096	1.00	15.32	A
	ATOM	1768	OE1	GLN	A	242	20.643	41.892	-0.411	1.00	15.92	A
	ATOM	1769	NE2	GLN	A	242	21.170	39.759	-0.878	1.00	15.08	A
	ATOM	1770	C	GLN	A	242	24.197	43.175	3.198	1.00	14.54	A
	ATOM	1771	O	GLN	A	242	24.712	43.753	2.242	1.00	13.67	A
10	ATOM	1772	N	LEU	A	243	24.323	43.594	4.458	1.00	13.82	A
	ATOM	1773	CA	LEU	A	243	25.106	44.779	4.808	1.00	14.57	A
	ATOM	1774	CB	LEU	A	243	24.690	45.307	6.185	1.00	14.76	A
	ATOM	1775	CG	LEU	A	243	23.302	45.958	6.227	1.00	16.04	A
	ATOM	1776	CD1	LEU	A	243	22.895	46.231	7.673	1.00	16.58	A
15	ATOM	1777	CD2	LEU	A	243	23.321	47.258	5.413	1.00	16.24	A
	ATOM	1778	C	LEU	A	243	26.598	44.455	4.786	1.00	14.27	A
	ATOM	1779	O	LEU	A	243	27.440	45.352	4.712	1.00	14.53	A
	ATOM	1780	N	GLU	A	244	26.918	43.168	4.875	1.00	13.75	A
	ATOM	1781	CA	GLU	A	244	28.302	42.720	4.789	1.00	13.31	A
20	ATOM	1782	CB	GLU	A	244	28.702	41.897	6.017	1.00	13.04	A
	ATOM	1783	CG	GLU	A	244	28.891	42.777	7.249	1.00	12.64	A
	ATOM	1784	CD	GLU	A	244	29.323	42.010	8.476	1.00	13.11	A
	ATOM	1785	OE1	GLU	A	244	28.806	40.897	8.699	1.00	12.89	A
	ATOM	1786	OE2	GLU	A	244	30.173	42.532	9.225	1.00	13.62	A
25	ATOM	1787	C	GLU	A	244	28.326	41.893	3.522	1.00	13.46	A
	ATOM	1788	O	GLU	A	244	27.505	40.992	3.344	1.00	13.61	A
	ATOM	1789	N	PHE	A	245	29.256	42.215	2.631	1.00	13.16	A
	ATOM	1790	CA	PHE	A	245	29.330	41.534	1.349	1.00	12.82	A
	ATOM	1791	CB	PHE	A	245	28.365	42.226	0.379	1.00	12.71	A
30	ATOM	1792	CG	PHE	A	245	28.495	43.731	0.367	1.00	13.34	A
	ATOM	1793	CD1	PHE	A	245	29.477	44.358	-0.396	1.00	13.26	A
	ATOM	1794	CD2	PHE	A	245	27.653	44.518	1.152	1.00	13.80	A
	ATOM	1795	CE1	PHE	A	245	29.620	45.761	-0.377	1.00	14.25	A
	ATOM	1796	CE2	PHE	A	245	27.785	45.915	1.181	1.00	13.45	A
35	ATOM	1797	CZ	PHE	A	245	28.771	46.536	0.416	1.00	13.39	A
	ATOM	1798	C	PHE	A	245	30.732	41.529	0.759	1.00	12.74	A
	ATOM	1799	O	PHE	A	245	31.610	42.268	1.202	1.00	12.98	A
	ATOM	1800	N	LEU	A	246	30.934	40.676	-0.239	1.00	12.93	A
	ATOM	1801	CA	LEU	A	246	32.209	40.590	-0.931	1.00	12.80	A
40	ATOM	1802	CB	LEU	A	246	32.480	39.143	-1.352	1.00	14.15	A
	ATOM	1803	CG	LEU	A	246	32.798	38.226	-0.162	1.00	15.44	A
	ATOM	1804	CD1	LEU	A	246	32.721	36.755	-0.566	1.00	16.21	A
	ATOM	1805	CD2	LEU	A	246	34.186	38.567	0.356	1.00	16.84	A
	ATOM	1806	C	LEU	A	246	32.062	41.506	-2.140	1.00	12.88	A
45	ATOM	1807	O	LEU	A	246	31.450	41.142	-3.143	1.00	12.86	A
	ATOM	1808	N	TRP	A	247	32.616	42.709	-2.021	1.00	12.15	A
	ATOM	1809	CA	TRP	A	247	32.528	43.725	-3.064	1.00	10.93	A
	ATOM	1810	CB	TRP	A	247	32.730	45.109	-2.428	1.00	11.30	A
	ATOM	1811	CG	TRP	A	247	32.227	46.275	-3.234	1.00	10.64	A
50	ATOM	1812	CD2	TRP	A	247	32.231	47.653	-2.835	1.00	10.92	A
	ATOM	1813	CE2	TRP	A	247	31.620	48.394	-3.875	1.00	10.68	A
	ATOM	1814	CE3	TRP	A	247	32.690	48.333	-1.699	1.00	10.84	A
	ATOM	1815	CD1	TRP	A	247	31.638	46.237	-4.465	1.00	11.11	A
	ATOM	1816	NE1	TRP	A	247	31.267	47.509	-4.858	1.00	10.24	A
55	ATOM	1817	CZ2	TRP	A	247	31.455	49.783	-3.809	1.00	11.19	A
	ATOM	1818	CZ3	TRP	A	247	32.527	49.715	-1.635	1.00	10.19	A
	ATOM	1819	CH2	TRP	A	247	31.914	50.424	-2.684	1.00	10.43	A
	ATOM	1820	C	TRP	A	247	33.547	43.517	-4.181	1.00	11.11	A
	ATOM	1821	O	TRP	A	247	34.749	43.713	-3.979	1.00	11.48	A

5	ATOM	1822	N	ARG	A	248	33.062	43.116	-5.355	1.00	10.75	A
	ATOM	1823	CA	ARG	A	248	33.929	42.905	-6.509	1.00	10.77	A
	ATOM	1824	CB	ARG	A	248	33.699	41.518	-7.123	1.00	11.28	A
	ATOM	1825	CG	ARG	A	248	32.347	41.360	-7.812	1.00	12.39	A
	ATOM	1826	CD	ARG	A	248	32.287	40.064	-8.622	1.00	12.96	A
10	ATOM	1827	NE	ARG	A	248	32.307	38.877	-7.771	1.00	13.78	A
	ATOM	1828	CZ	ARG	A	248	32.297	37.627	-8.232	1.00	15.01	A
	ATOM	1829	NH1	ARG	A	248	32.272	37.396	-9.540	1.00	14.24	A
	ATOM	1830	NH2	ARG	A	248	32.303	36.603	-7.387	1.00	15.39	A
	ATOM	1831	C	ARG	A	248	33.618	43.973	-7.557	1.00	10.84	A
15	ATOM	1832	O	ARG	A	248	32.565	44.613	-7.508	1.00	10.46	A
	ATOM	1833	N	GLN	A	249	34.531	44.154	-8.504	1.00	10.83	A
	ATOM	1834	CA	GLN	A	249	34.351	45.141	-9.560	1.00	11.65	A
	ATOM	1835	CB	GLN	A	249	35.678	45.363	-10.298	1.00	11.30	A
	ATOM	1836	CG	GLN	A	249	36.810	45.827	-9.377	1.00	11.05	A
20	ATOM	1837	CD	GLN	A	249	36.444	47.085	-8.598	1.00	11.05	A
	ATOM	1838	OE1	GLN	A	249	36.457	47.098	-7.361	1.00	12.77	A
	ATOM	1839	NE2	GLN	A	249	36.111	48.148	-9.320	1.00	9.23	A
	ATOM	1840	C	GLN	A	249	33.256	44.688	-10.524	1.00	12.10	A
	ATOM	1841	O	GLN	A	249	33.049	43.490	-10.725	1.00	11.94	A
25	ATOM	1842	N	ILE	A	250	32.553	45.647	-11.122	1.00	12.93	A
	ATOM	1843	CA	ILE	A	250	31.453	45.320	-12.026	1.00	13.51	A
	ATOM	1844	CB	ILE	A	250	30.767	46.602	-12.572	1.00	13.77	A
	ATOM	1845	CG2	ILE	A	250	30.103	47.363	-11.428	1.00	13.59	A
	ATOM	1846	CG1	ILE	A	250	31.785	47.485	-13.296	1.00	13.49	A
30	ATOM	1847	CD1	ILE	A	250	31.191	48.781	-13.837	1.00	14.87	A
	ATOM	1848	C	ILE	A	250	31.782	44.404	-13.208	1.00	14.67	A
	ATOM	1849	O	ILE	A	250	30.896	43.715	-13.721	1.00	14.61	A
	ATOM	1850	N	TRP	A	251	33.043	44.376	-13.626	1.00	15.25	A
	ATOM	1851	CA	TRP	A	251	33.455	43.547	-14.761	1.00	16.73	A
35	ATOM	1852	CB	TRP	A	251	34.444	44.325	-15.625	1.00	16.94	A
	ATOM	1853	CG	TRP	A	251	35.745	44.514	-14.923	1.00	17.70	A
	ATOM	1854	CD2	TRP	A	251	36.159	45.669	-14.196	1.00	17.07	A
	ATOM	1855	CE2	TRP	A	251	37.412	45.372	-13.618	1.00	17.86	A
	ATOM	1856	CE3	TRP	A	251	35.591	46.929	-13.974	1.00	17.14	A
40	ATOM	1857	CD1	TRP	A	251	36.738	43.585	-14.765	1.00	17.86	A
	ATOM	1858	NE1	TRP	A	251	37.740	44.091	-13.981	1.00	17.65	A
	ATOM	1859	CZ2	TRP	A	251	38.108	46.289	-12.830	1.00	17.71	A
	ATOM	1860	CZ3	TRP	A	251	36.282	47.842	-13.191	1.00	17.37	A
	ATOM	1861	CH2	TRP	A	251	37.529	47.516	-12.628	1.00	18.49	A
45	ATOM	1862	C	TRP	A	251	34.121	42.234	-14.344	1.00	18.00	A
	ATOM	1863	O	TRP	A	251	34.454	41.403	-15.194	1.00	18.22	A
	ATOM	1864	N	ASP	A	252	34.325	42.062	-13.043	1.00	18.23	A
	ATOM	1865	CA	ASP	A	252	34.996	40.883	-12.499	1.00	19.34	A
	ATOM	1866	CB	ASP	A	252	35.549	41.228	-11.110	1.00	18.94	A
50	ATOM	1867	CG	ASP	A	252	36.320	40.084	-10.484	1.00	20.28	A
	ATOM	1868	OD1	ASP	A	252	36.654	39.117	-11.207	1.00	20.52	A
	ATOM	1869	OD2	ASP	A	252	36.596	40.161	-9.267	1.00	18.06	A
	ATOM	1870	C	ASP	A	252	34.121	39.630	-12.436	1.00	19.79	A
	ATOM	1871	O	ASP	A	252	33.323	39.456	-11.520	1.00	19.33	A
55	ATOM	1872	N	ASN	A	253	34.292	38.750	-13.417	1.00	21.32	A
	ATOM	1873	CA	ASN	A	253	33.513	37.520	-13.487	1.00	22.54	A
	ATOM	1874	CB	ASN	A	253	33.580	36.954	-14.907	1.00	24.16	A
	ATOM	1875	CG	ASN	A	253	32.717	35.727	-15.085	1.00	25.52	A
	ATOM	1876	OD1	ASN	A	253	33.192	34.684	-15.530	1.00	26.98	A

5	ATOM	1877	ND2	ASN	A	253	31.439	35.845	-14.744	1.00	25.84	A
	ATOM	1878	C	ASN	A	253	33.980	36.456	-12.490	1.00	22.75	A
	ATOM	1879	O	ASN	A	253	33.162	35.747	-11.903	1.00	23.28	A
	ATOM	1880	N	LYS	A	254	35.290	36.355	-12.295	1.00	23.59	A
	ATOM	1881	CA	LYS	A	254	35.855	35.357	-11.385	1.00	24.65	A
10	ATOM	1882	CB	LYS	A	254	37.324	35.101	-11.744	1.00	26.71	A
	ATOM	1883	CG	LYS	A	254	37.939	33.877	-11.070	1.00	28.98	A
	ATOM	1884	CD	LYS	A	254	39.324	33.578	-11.640	1.00	30.99	A
	ATOM	1885	CE	LYS	A	254	39.916	32.299	-11.055	1.00	31.41	A
	ATOM	1886	NZ	LYS	A	254	40.115	32.383	-9.580	1.00	32.32	A
15	ATOM	1887	C	LYS	A	254	35.741	35.749	-9.912	1.00	24.07	A
	ATOM	1888	O	LYS	A	254	35.532	34.893	-9.048	1.00	23.89	A
	ATOM	1889	N	GLY	A	255	35.888	37.040	-9.628	1.00	23.13	A
	ATOM	1890	CA	GLY	A	255	35.788	37.510	-8.257	1.00	22.09	A
	ATOM	1891	C	GLY	A	255	37.110	37.715	-7.534	1.00	21.87	A
20	ATOM	1892	O	GLY	A	255	37.128	37.864	-6.313	1.00	21.29	A
	ATOM	1893	N	ASP	A	256	38.216	37.735	-8.270	1.00	21.62	A
	ATOM	1894	CA	ASP	A	256	39.525	37.919	-7.648	1.00	21.86	A
	ATOM	1895	CB	ASP	A	256	40.647	37.613	-8.645	1.00	25.21	A
	ATOM	1896	CG	ASP	A	256	40.638	36.171	-9.112	1.00	28.23	A
25	ATOM	1897	OD1	ASP	A	256	40.472	35.269	-8.260	1.00	30.23	A
	ATOM	1898	OD2	ASP	A	256	40.808	35.941	-10.329	1.00	30.53	A
	ATOM	1899	C	ASP	A	256	39.741	39.319	-7.074	1.00	20.26	A
	ATOM	1900	O	ASP	A	256	40.663	39.532	-6.291	1.00	19.39	A
	ATOM	1901	N	THR	A	257	38.902	40.274	-7.465	1.00	17.90	A
30	ATOM	1902	CA	THR	A	257	39.037	41.639	-6.958	1.00	16.74	A
	ATOM	1903	CB	THR	A	257	38.540	42.668	-7.985	1.00	16.55	A
	ATOM	1904	OG1	THR	A	257	37.135	42.482	-8.200	1.00	16.27	A
	ATOM	1905	CG2	THR	A	257	39.283	42.510	-9.303	1.00	16.66	A
	ATOM	1906	C	THR	A	257	38.233	41.848	-5.675	1.00	16.22	A
35	ATOM	1907	O	THR	A	257	38.341	42.894	-5.028	1.00	15.96	A
	ATOM	1908	N	ALA	A	258	37.434	40.847	-5.315	1.00	14.88	A
	ATOM	1909	CA	ALA	A	258	36.578	40.912	-4.137	1.00	14.24	A
	ATOM	1910	CB	ALA	A	258	35.847	39.583	-3.957	1.00	14.17	A
	ATOM	1911	C	ALA	A	258	37.267	41.296	-2.831	1.00	13.50	A
40	ATOM	1912	O	ALA	A	258	38.358	40.821	-2.524	1.00	13.51	A
	ATOM	1913	N	LEU	A	259	36.601	42.159	-2.068	1.00	12.70	A
	ATOM	1914	CA	LEU	A	259	37.092	42.610	-0.768	1.00	12.24	A
	ATOM	1915	CB	LEU	A	259	37.696	44.016	-0.867	1.00	11.63	A
	ATOM	1916	CG	LEU	A	259	38.380	44.520	0.408	1.00	11.76	A
45	ATOM	1917	CD1	LEU	A	259	39.562	43.608	0.743	1.00	11.66	A
	ATOM	1918	CD2	LEU	A	259	38.849	45.963	0.220	1.00	12.00	A
	ATOM	1919	C	LEU	A	259	35.901	42.634	0.186	1.00	11.86	A
	ATOM	1920	O	LEU	A	259	34.875	43.245	-0.111	1.00	11.05	A
	ATOM	1921	N	PHE	A	260	36.032	41.959	1.324	1.00	11.65	A
50	ATOM	1922	CA	PHE	A	260	34.951	41.921	2.303	1.00	11.54	A
	ATOM	1923	CB	PHE	A	260	35.345	41.055	3.501	1.00	11.54	A
	ATOM	1924	CG	PHE	A	260	34.245	40.882	4.503	1.00	12.18	A
	ATOM	1925	CD1	PHE	A	260	33.242	39.934	4.301	1.00	12.98	A
	ATOM	1926	CD2	PHE	A	260	34.195	41.679	5.640	1.00	12.01	A
55	ATOM	1927	CE1	PHE	A	260	32.209	39.786	5.218	1.00	12.59	A
	ATOM	1928	CE2	PHE	A	260	33.167	41.541	6.565	1.00	12.09	A
	ATOM	1929	CZ	PHE	A	260	32.170	40.593	6.355	1.00	12.78	A
	ATOM	1930	C	PHE	A	260	34.627	43.336	2.773	1.00	11.53	A
	ATOM	1931	O	PHE	A	260	35.507	44.076	3.222	1.00	11.50	A

5	ATOM	1932	N	THR	A	261	33.356	43.707	2.680	1.00	11.54	A
	ATOM	1933	CA	THR	A	261	32.931	45.044	3.061	1.00	11.72	A
	ATOM	1934	CB	THR	A	261	32.464	45.834	1.822	1.00	12.10	A
	ATOM	1935	OG1	THR	A	261	33.510	45.841	0.842	1.00	12.08	A
	ATOM	1936	CG2	THR	A	261	32.114	47.273	2.195	1.00	12.27	A
10	ATOM	1937	C	THR	A	261	31.796	45.041	4.075	1.00	11.96	A
	ATOM	1938	O	THR	A	261	30.841	44.275	3.954	1.00	11.91	A
	ATOM	1939	N	HIS	A	262	31.909	45.918	5.065	1.00	11.38	A
	ATOM	1940	CA	HIS	A	262	30.894	46.069	6.095	1.00	11.42	A
	ATOM	1941	CB	HIS	A	262	31.522	45.971	7.485	1.00	12.15	A
15	ATOM	1942	CG	HIS	A	262	30.589	46.339	8.598	1.00	12.10	A
	ATOM	1943	CD2	HIS	A	262	30.188	47.547	9.065	1.00	12.09	A
	ATOM	1944	ND1	HIS	A	262	29.950	45.398	9.376	1.00	11.76	A
	ATOM	1945	CE1	HIS	A	262	29.199	46.010	10.277	1.00	12.27	A
	ATOM	1946	NE2	HIS	A	262	29.327	47.314	10.111	1.00	12.08	A
20	ATOM	1947	C	HIS	A	262	30.271	47.451	5.945	1.00	11.76	A
	ATOM	1948	O	HIS	A	262	30.965	48.463	6.052	1.00	10.18	A
	ATOM	1949	N	MET	A	263	28.968	47.491	5.689	1.00	11.17	A
	ATOM	1950	CA	MET	A	263	28.267	48.759	5.561	1.00	12.18	A
	ATOM	1951	CB	MET	A	263	27.257	48.715	4.410	1.00	11.99	A
25	ATOM	1952	CG	MET	A	263	26.484	50.024	4.207	1.00	12.03	A
	ATOM	1953	SD	MET	A	263	25.055	49.848	3.084	1.00	13.44	A
	ATOM	1954	CE	MET	A	263	25.884	49.600	1.504	1.00	12.15	A
	ATOM	1955	C	MET	A	263	27.520	48.990	6.868	1.00	12.69	A
	ATOM	1956	O	MET	A	263	26.764	48.122	7.314	1.00	11.94	A
30	ATOM	1957	N	MET	A	264	27.740	50.143	7.492	1.00	12.61	A
	ATOM	1958	CA	MET	A	264	27.038	50.454	8.730	1.00	13.99	A
	ATOM	1959	CB	MET	A	264	27.631	51.712	9.366	1.00	15.28	A
	ATOM	1960	CG	MET	A	264	29.035	51.450	9.916	1.00	17.24	A
	ATOM	1961	SD	MET	A	264	29.953	52.918	10.450	1.00	22.77	A
35	ATOM	1962	CE	MET	A	264	28.945	53.487	11.811	1.00	21.46	A
	ATOM	1963	C	MET	A	264	25.573	50.613	8.326	1.00	14.16	A
	ATOM	1964	O	MET	A	264	25.275	51.066	7.220	1.00	14.15	A
	ATOM	1965	N	PRO	A	265	24.640	50.241	9.216	1.00	13.83	A
	ATOM	1966	CD	PRO	A	265	24.882	49.677	10.559	1.00	13.64	A
40	ATOM	1967	CA	PRO	A	265	23.203	50.312	8.938	1.00	14.21	A
	ATOM	1968	CB	PRO	A	265	22.661	49.173	9.787	1.00	14.20	A
	ATOM	1969	CG	PRO	A	265	23.456	49.357	11.058	1.00	14.38	A
	ATOM	1970	C	PRO	A	265	22.424	51.589	9.194	1.00	14.67	A
	ATOM	1971	O	PRO	A	265	21.335	51.770	8.642	1.00	14.40	A
45	ATOM	1972	N	PHE	A	266	22.973	52.482	10.001	1.00	14.07	A
	ATOM	1973	CA	PHE	A	266	22.229	53.671	10.359	1.00	14.30	A
	ATOM	1974	CB	PHE	A	266	22.185	53.727	11.889	1.00	12.76	A
	ATOM	1975	CG	PHE	A	266	21.650	52.451	12.517	1.00	13.20	A
	ATOM	1976	CD1	PHE	A	266	22.244	51.907	13.655	1.00	12.53	A
50	ATOM	1977	CD2	PHE	A	266	20.555	51.792	11.957	1.00	12.83	A
	ATOM	1978	CE1	PHE	A	266	21.755	50.723	14.224	1.00	13.38	A
	ATOM	1979	CE2	PHE	A	266	20.055	50.610	12.515	1.00	12.47	A
	ATOM	1980	CZ	PHE	A	266	20.655	50.073	13.651	1.00	12.89	A
	ATOM	1981	C	PHE	A	266	22.600	55.025	9.743	1.00	14.18	A
55	ATOM	1982	O	PHE	A	266	23.519	55.139	8.930	1.00	14.66	A
	ATOM	1983	N	TYR	A	267	21.841	56.038	10.142	1.00	14.48	A
	ATOM	1984	CA	TYR	A	267	21.956	57.413	9.655	1.00	14.39	A
	ATOM	1985	CB	TYR	A	267	20.829	58.232	10.294	1.00	15.80	A
	ATOM	1986	CG	TYR	A	267	20.885	59.729	10.094	1.00	16.29	A

5	ATOM	1987	CD1	TYR	A	267	20.538	60.310	8.877	1.00	17.30	A
	ATOM	1988	CE1	TYR	A	267	20.534	61.705	8.717	1.00	17.59	A
	ATOM	1989	CD2	TYR	A	267	21.239	60.571	11.149	1.00	16.80	A
	ATOM	1990	CE2	TYR	A	267	21.242	61.954	11.001	1.00	17.38	A
	ATOM	1991	CZ	TYR	A	267	20.887	62.514	9.789	1.00	18.05	A
10	ATOM	1992	OH	TYR	A	267	20.876	63.883	9.659	1.00	18.70	A
	ATOM	1993	C	TYR	A	267	23.293	58.120	9.861	1.00	14.81	A
	ATOM	1994	O	TYR	A	267	23.699	58.943	9.035	1.00	13.98	A
	ATOM	1995	N	SER	A	268	23.977	57.810	10.955	1.00	14.04	A
	ATOM	1996	CA	SER	A	268	25.247	58.465	11.242	1.00	14.27	A
15	ATOM	1997	CB	SER	A	268	24.980	59.724	12.075	1.00	14.25	A
	ATOM	1998	OG	SER	A	268	26.173	60.276	12.600	1.00	14.87	A
	ATOM	1999	C	SER	A	268	26.230	57.559	11.972	1.00	13.84	A
	ATOM	2000	O	SER	A	268	25.871	56.468	12.426	1.00	13.95	A
	ATOM	2001	N	TYR	A	269	27.477	58.011	12.072	1.00	13.39	A
20	ATOM	2002	CA	TYR	A	269	28.503	57.255	12.773	1.00	12.49	A
	ATOM	2003	CB	TYR	A	269	29.861	57.390	12.066	1.00	11.88	A
	ATOM	2004	CG	TYR	A	269	30.310	58.820	11.840	1.00	11.45	A
	ATOM	2005	CD1	TYR	A	269	30.728	59.623	12.903	1.00	10.84	A
	ATOM	2006	CE1	TYR	A	269	31.110	60.956	12.698	1.00	12.04	A
25	ATOM	2007	CD2	TYR	A	269	30.288	59.378	10.560	1.00	11.68	A
	ATOM	2008	CE2	TYR	A	269	30.666	60.704	10.343	1.00	12.15	A
	ATOM	2009	CZ	TYR	A	269	31.070	61.487	11.411	1.00	11.80	A
	ATOM	2010	OH	TYR	A	269	31.402	62.805	11.190	1.00	12.70	A
	ATOM	2011	C	TYR	A	269	28.625	57.739	14.218	1.00	12.89	A
30	ATOM	2012	O	TYR	A	269	29.446	57.222	14.974	1.00	12.77	A
	ATOM	2013	N	ASP	A	270	27.821	58.729	14.607	1.00	12.89	A
	ATOM	2014	CA	ASP	A	270	27.897	59.218	15.984	1.00	12.80	A
	ATOM	2015	CB	ASP	A	270	27.202	60.585	16.151	1.00	13.50	A
	ATOM	2016	CG	ASP	A	270	25.709	60.549	15.862	1.00	14.42	A
35	ATOM	2017	OD1	ASP	A	270	25.112	59.453	15.808	1.00	14.48	A
	ATOM	2018	OD2	ASP	A	270	25.129	61.649	15.708	1.00	15.21	A
	ATOM	2019	C	ASP	A	270	27.312	58.179	16.936	1.00	13.07	A
	ATOM	2020	O	ASP	A	270	26.657	57.232	16.504	1.00	12.66	A
	ATOM	2021	N	ILE	A	271	27.556	58.343	18.230	1.00	12.62	A
40	ATOM	2022	CA	ILE	A	271	27.082	57.360	19.192	1.00	12.36	A
	ATOM	2023	CB	ILE	A	271	27.586	57.716	20.610	1.00	11.96	A
	ATOM	2024	CG2	ILE	A	271	27.051	56.718	21.634	1.00	11.64	A
	ATOM	2025	CG1	ILE	A	271	29.120	57.666	20.615	1.00	12.08	A
	ATOM	2026	CD1	ILE	A	271	29.774	58.239	21.866	1.00	12.93	A
45	ATOM	2027	C	ILE	A	271	25.570	57.113	19.170	1.00	12.34	A
	ATOM	2028	O	ILE	A	271	25.131	55.966	19.244	1.00	12.60	A
	ATOM	2029	N	PRO	A	272	24.754	58.172	19.049	1.00	12.54	A
	ATOM	2030	CD	PRO	A	272	25.057	59.612	19.135	1.00	12.73	A
	ATOM	2031	CA	PRO	A	272	23.305	57.943	19.022	1.00	12.67	A
50	ATOM	2032	CB	PRO	A	272	22.737	59.352	18.875	1.00	12.85	A
	ATOM	2033	CG	PRO	A	272	23.745	60.190	19.610	1.00	13.34	A
	ATOM	2034	C	PRO	A	272	22.856	57.017	17.881	1.00	13.24	A
	ATOM	2035	O	PRO	A	272	21.801	56.394	17.966	1.00	13.14	A
	ATOM	2036	N	HIS	A	273	23.661	56.918	16.825	1.00	12.69	A
55	ATOM	2037	CA	HIS	A	273	23.313	56.077	15.678	1.00	13.21	A
	ATOM	2038	CB	HIS	A	273	23.273	56.938	14.412	1.00	13.31	A
	ATOM	2039	CG	HIS	A	273	22.261	58.040	14.473	1.00	14.15	A
	ATOM	2040	CD2	HIS	A	273	22.363	59.319	14.904	1.00	13.91	A
	ATOM	2041	ND1	HIS	A	273	20.940	57.859	14.121	1.00	15.41	A

5	ATOM	2042	CE1	HIS	A	273	20.273	58.979	14.333	1.00	13.45	A
	ATOM	2043	NE2	HIS	A	273	21.112	59.881	14.809	1.00	16.34	A
	ATOM	2044	C	HIS	A	273	24.233	54.876	15.457	1.00	13.37	A
	ATOM	2045	O	HIS	A	273	24.334	54.360	14.339	1.00	12.85	A
	ATOM	2046	N	THR	A	274	24.895	54.421	16.518	1.00	13.98	A
10	ATOM	2047	CA	THR	A	274	25.788	53.276	16.395	1.00	13.68	A
	ATOM	2048	CB	THR	A	274	27.274	53.726	16.415	1.00	13.90	A
	ATOM	2049	OG1	THR	A	274	27.480	54.682	17.459	1.00	13.47	A
	ATOM	2050	CG2	THR	A	274	27.656	54.346	15.079	1.00	12.79	A
	ATOM	2051	C	THR	A	274	25.586	52.153	17.420	1.00	14.02	A
15	ATOM	2052	O	THR	A	274	26.143	51.069	17.257	1.00	14.90	A
	ATOM	2053	N	CYS	A	275	24.795	52.390	18.466	1.00	14.38	A
	ATOM	2054	CA	CYS	A	275	24.569	51.344	19.471	1.00	14.59	A
	ATOM	2055	C	CYS	A	275	23.380	50.457	19.110	1.00	14.87	A
	ATOM	2056	O	CYS	A	275	23.303	49.298	19.525	1.00	14.62	A
20	ATOM	2057	CB	CYS	A	275	24.331	51.965	20.851	1.00	15.94	A
	ATOM	2058	SG	CYS	A	275	22.592	52.094	21.403	1.00	16.28	A
	ATOM	2059	N	GLY	A	276	22.456	51.017	18.337	1.00	14.95	A
	ATOM	2060	CA	GLY	A	276	21.266	50.290	17.940	1.00	15.51	A
	ATOM	2061	C	GLY	A	276	20.345	51.178	17.124	1.00	15.57	A
25	ATOM	2062	O	GLY	A	276	20.714	52.312	16.811	1.00	15.76	A
	ATOM	2063	N	PRO	A	277	19.131	50.704	16.783	1.00	14.99	A
	ATOM	2064	CD	PRO	A	277	18.615	49.379	17.174	1.00	15.17	A
	ATOM	2065	CA	PRO	A	277	18.129	51.430	15.993	1.00	15.46	A
	ATOM	2066	CB	PRO	A	277	17.105	50.343	15.667	1.00	15.74	A
30	ATOM	2067	CG	PRO	A	277	17.128	49.514	16.907	1.00	14.95	A
	ATOM	2068	C	PRO	A	277	17.462	52.650	16.626	1.00	15.44	A
	ATOM	2069	O	PRO	A	277	16.880	53.468	15.915	1.00	15.14	A
	ATOM	2070	N	ASP	A	278	17.536	52.777	17.948	1.00	15.72	A
	ATOM	2071	CA	ASP	A	278	16.887	53.899	18.628	1.00	16.37	A
35	ATOM	2072	CB	ASP	A	278	16.015	53.382	19.778	1.00	16.45	A
	ATOM	2073	CG	ASP	A	278	15.089	54.449	20.333	1.00	17.33	A
	ATOM	2074	OD1	ASP	A	278	15.253	55.635	19.972	1.00	17.28	A
	ATOM	2075	OD2	ASP	A	278	14.201	54.102	21.134	1.00	16.81	A
	ATOM	2076	C	ASP	A	278	17.865	54.934	19.174	1.00	16.20	A
40	ATOM	2077	O	ASP	A	278	18.482	54.729	20.219	1.00	15.93	A
	ATOM	2078	N	PRO	A	279	18.003	56.073	18.480	1.00	16.64	A
	ATOM	2079	CD	PRO	A	279	17.320	56.464	17.234	1.00	16.82	A
	ATOM	2080	CA	PRO	A	279	18.921	57.126	18.928	1.00	17.09	A
	ATOM	2081	CB	PRO	A	279	18.850	58.152	17.793	1.00	16.72	A
45	ATOM	2082	CG	PRO	A	279	17.464	57.968	17.253	1.00	17.23	A
	ATOM	2083	C	PRO	A	279	18.571	57.723	20.291	1.00	17.34	A
	ATOM	2084	O	PRO	A	279	19.447	58.221	20.996	1.00	17.37	A
	ATOM	2085	N	LYS	A	280	17.296	57.676	20.667	1.00	17.71	A
	ATOM	2086	CA	LYS	A	280	16.887	58.217	21.960	1.00	18.13	A
50	ATOM	2087	CB	LYS	A	280	15.363	58.214	22.097	1.00	19.17	A
	ATOM	2088	CG	LYS	A	280	14.871	58.892	23.370	1.00	21.45	A
	ATOM	2089	CD	LYS	A	280	13.358	58.837	23.491	1.00	23.26	A
	ATOM	2090	CE	LYS	A	280	12.876	57.413	23.710	1.00	26.06	A
	ATOM	2091	NZ	LYS	A	280	13.446	56.812	24.960	1.00	28.16	A
55	ATOM	2092	C	LYS	A	280	17.500	57.389	23.081	1.00	17.62	A
	ATOM	2093	O	LYS	A	280	17.784	57.902	24.165	1.00	18.50	A
	ATOM	2094	N	VAL	A	281	17.702	56.102	22.819	1.00	17.07	A
	ATOM	2095	CA	VAL	A	281	18.299	55.215	23.810	1.00	16.41	A
	ATOM	2096	CB	VAL	A	281	17.845	53.748	23.599	1.00	17.36	A

5	ATOM	2097	CG1	VAL	A	281	18.577	52.827	24.568	1.00	16.56	A
	ATOM	2098	CG2	VAL	A	281	16.334	53.631	23.793	1.00	16.45	A
	ATOM	2099	C	VAL	A	281	19.824	55.281	23.705	1.00	16.33	A
	ATOM	2100	O	VAL	A	281	20.522	55.440	24.705	1.00	15.54	A
	ATOM	2101	N	CYS	A	282	20.337	55.163	22.484	1.00	15.75	A
10	ATOM	2102	CA	CYS	A	282	21.780	55.198	22.266	1.00	16.11	A
	ATOM	2103	C	CYS	A	282	22.426	56.483	22.773	1.00	16.13	A
	ATOM	2104	O	CYS	A	282	23.551	56.463	23.282	1.00	16.09	A
	ATOM	2105	CB	CYS	A	282	22.096	55.029	20.780	1.00	15.93	A
	ATOM	2106	SG	CYS	A	282	21.730	53.383	20.093	1.00	16.46	A
15	ATOM	2107	N	CYS	A	283	21.720	57.600	22.640	1.00	15.64	A
	ATOM	2108	CA	CYS	A	283	22.271	58.870	23.088	1.00	16.03	A
	ATOM	2109	C	CYS	A	283	22.575	58.830	24.582	1.00	16.35	A
	ATOM	2110	O	CYS	A	283	23.480	59.514	25.061	1.00	16.19	A
	ATOM	2111	CB	CYS	A	283	21.309	60.023	22.785	1.00	17.15	A
20	ATOM	2112	SG	CYS	A	283	22.169	61.628	22.845	1.00	17.80	A
	ATOM	2113	N	GLN	A	284	21.820	58.019	25.315	1.00	16.07	A
	ATOM	2114	CA	GLN	A	284	22.013	57.898	26.754	1.00	16.46	A
	ATOM	2115	CB	GLN	A	284	20.823	57.169	27.382	1.00	16.54	A
	ATOM	2116	CG	GLN	A	284	19.513	57.918	27.223	1.00	17.45	A
25	ATOM	2117	CD	GLN	A	284	18.334	57.129	27.737	1.00	17.46	A
	ATOM	2118	OE1	GLN	A	284	18.291	56.743	28.907	1.00	18.95	A
	ATOM	2119	NE2	GLN	A	284	17.367	56.880	26.865	1.00	18.72	A
	ATOM	2120	C	GLN	A	284	23.300	57.168	27.095	1.00	16.25	A
	ATOM	2121	O	GLN	A	284	23.680	57.077	28.262	1.00	16.37	A
30	ATOM	2122	N	PHE	A	285	23.978	56.654	26.075	1.00	15.74	A
	ATOM	2123	CA	PHE	A	285	25.216	55.938	26.309	1.00	15.95	A
	ATOM	2124	CB	PHE	A	285	25.060	54.495	25.821	1.00	16.02	A
	ATOM	2125	CG	PHE	A	285	24.080	53.705	26.652	1.00	16.47	A
	ATOM	2126	CD1	PHE	A	285	24.487	53.090	27.832	1.00	16.88	A
35	ATOM	2127	CD2	PHE	A	285	22.732	53.660	26.306	1.00	17.20	A
	ATOM	2128	CE1	PHE	A	285	23.566	52.444	28.664	1.00	17.28	A
	ATOM	2129	CE2	PHE	A	285	21.799	53.017	27.129	1.00	18.31	A
	ATOM	2130	CZ	PHE	A	285	22.220	52.409	28.312	1.00	18.03	A
	ATOM	2131	C	PHE	A	285	26.439	56.637	25.730	1.00	15.58	A
40	ATOM	2132	O	PHE	A	285	27.481	56.025	25.500	1.00	15.28	A
	ATOM	2133	N	ASP	A	286	26.282	57.938	25.496	1.00	15.60	A
	ATOM	2134	CA	ASP	A	286	27.365	58.802	25.039	1.00	15.26	A
	ATOM	2135	CB	ASP	A	286	26.926	59.691	23.875	1.00	15.15	A
	ATOM	2136	CG	ASP	A	286	28.043	60.603	23.389	1.00	15.24	A
45	ATOM	2137	OD1	ASP	A	286	29.086	60.683	24.074	1.00	15.09	A
	ATOM	2138	OD2	ASP	A	286	27.876	61.247	22.331	1.00	14.65	A
	ATOM	2139	C	ASP	A	286	27.543	59.644	26.296	1.00	15.45	A
	ATOM	2140	O	ASP	A	286	26.896	60.677	26.468	1.00	15.12	A
	ATOM	2141	N	PHE	A	287	28.414	59.189	27.186	1.00	15.64	A
50	ATOM	2142	CA	PHE	A	287	28.606	59.873	28.449	1.00	16.17	A
	ATOM	2143	CB	PHE	A	287	29.340	58.939	29.411	1.00	15.78	A
	ATOM	2144	CG	PHE	A	287	28.596	57.652	29.661	1.00	15.58	A
	ATOM	2145	CD1	PHE	A	287	28.811	56.538	28.856	1.00	14.97	A
	ATOM	2146	CD2	PHE	A	287	27.614	57.584	30.646	1.00	15.57	A
55	ATOM	2147	CE1	PHE	A	287	28.056	55.378	29.025	1.00	15.24	A
	ATOM	2148	CE2	PHE	A	287	26.852	56.428	30.821	1.00	15.22	A
	ATOM	2149	CZ	PHE	A	287	27.074	55.323	30.008	1.00	15.06	A
	ATOM	2150	C	PHE	A	287	29.236	61.258	28.424	1.00	17.09	A
	ATOM	2151	O	PHE	A	287	29.471	61.850	29.471	1.00	16.59	A

5	ATOM	2152	N	LYS	A	288	29.493	61.788	27.232	1.00	17.81	A
	ATOM	2153	CA	LYS	A	288	30.053	63.131	27.139	1.00	17.75	A
	ATOM	2154	CB	LYS	A	288	30.972	63.261	25.912	1.00	17.97	A
	ATOM	2155	CG	LYS	A	288	31.716	64.598	25.846	1.00	17.53	A
	ATOM	2156	CD	LYS	A	288	32.660	64.693	24.649	1.00	16.44	A
10	ATOM	2157	CE	LYS	A	288	33.438	66.003	24.686	1.00	17.49	A
	ATOM	2158	NZ	LYS	A	288	34.386	66.162	23.535	1.00	17.95	A
	ATOM	2159	C	LYS	A	288	28.900	64.132	27.025	1.00	18.16	A
	ATOM	2160	O	LYS	A	288	29.121	65.337	26.953	1.00	17.87	A
	ATOM	2161	N	ARG	A	289	27.667	63.634	27.027	1.00	19.07	A
15	ATOM	2162	CA	ARG	A	289	26.507	64.513	26.891	1.00	20.41	A
	ATOM	2163	CB	ARG	A	289	25.549	63.961	25.830	1.00	19.03	A
	ATOM	2164	CG	ARG	A	289	26.173	63.698	24.468	1.00	17.69	A
	ATOM	2165	CD	ARG	A	289	25.092	63.465	23.431	1.00	17.66	A
	ATOM	2166	NE	ARG	A	289	25.623	63.059	22.132	1.00	16.20	A
20	ATOM	2167	CZ	ARG	A	289	25.144	63.492	20.970	1.00	16.63	A
	ATOM	2168	NH1	ARG	A	289	24.132	64.353	20.949	1.00	15.95	A
	ATOM	2169	NH2	ARG	A	289	25.660	63.052	19.831	1.00	15.30	A
	ATOM	2170	C	ARG	A	289	25.711	64.769	28.171	1.00	22.16	A
	ATOM	2171	O	ARG	A	289	24.487	64.884	28.118	1.00	22.14	A
25	ATOM	2172	N	MET	A	290	26.381	64.881	29.312	1.00	24.35	A
	ATOM	2173	CA	MET	A	290	25.653	65.113	30.556	1.00	26.07	A
	ATOM	2174	CB	MET	A	290	26.232	64.241	31.677	1.00	27.03	A
	ATOM	2175	CG	MET	A	290	26.008	62.749	31.441	1.00	27.88	A
	ATOM	2176	SD	MET	A	290	26.517	61.649	32.787	1.00	29.89	A
30	ATOM	2177	CE	MET	A	290	28.257	61.423	32.409	1.00	28.24	A
	ATOM	2178	C	MET	A	290	25.566	66.577	30.999	1.00	26.78	A
	ATOM	2179	O	MET	A	290	24.848	66.894	31.953	1.00	28.04	A
	ATOM	2180	N	GLY	A	291	26.280	67.469	30.311	1.00	26.38	A
	ATOM	2181	CA	GLY	A	291	26.213	68.879	30.666	1.00	25.03	A
35	ATOM	2182	C	GLY	A	291	27.500	69.688	30.697	1.00	24.62	A
	ATOM	2183	O	GLY	A	291	27.636	70.675	29.967	1.00	23.97	A
	ATOM	2184	N	SER	A	292	28.442	69.282	31.546	1.00	22.93	A
	ATOM	2185	CA	SER	A	292	29.711	69.989	31.691	1.00	21.82	A
	ATOM	2186	CB	SER	A	292	30.584	69.289	32.734	1.00	22.87	A
40	ATOM	2187	OG	SER	A	292	30.945	67.989	32.304	1.00	23.87	A
	ATOM	2188	C	SER	A	292	30.512	70.161	30.399	1.00	20.97	A
	ATOM	2189	O	SER	A	292	31.381	71.032	30.321	1.00	19.65	A
	ATOM	2190	N	PHE	A	293	30.231	69.333	29.394	1.00	19.55	A
	ATOM	2191	CA	PHE	A	293	30.942	69.418	28.119	1.00	19.27	A
45	ATOM	2192	CB	PHE	A	293	31.173	68.021	27.530	1.00	19.08	A
	ATOM	2193	CG	PHE	A	293	32.119	67.173	28.329	1.00	18.85	A
	ATOM	2194	CD1	PHE	A	293	31.641	66.288	29.286	1.00	19.32	A
	ATOM	2195	CD2	PHE	A	293	33.491	67.266	28.127	1.00	18.76	A
	ATOM	2196	CE1	PHE	A	293	32.517	65.501	30.032	1.00	19.71	A
50	ATOM	2197	CE2	PHE	A	293	34.379	66.487	28.866	1.00	19.38	A
	ATOM	2198	CZ	PHE	A	293	33.892	65.601	29.821	1.00	19.67	A
	ATOM	2199	C	PHE	A	293	30.204	70.271	27.091	1.00	19.29	A
	ATOM	2200	O	PHE	A	293	30.661	70.420	25.954	1.00	17.76	A
	ATOM	2201	N	GLY	A	294	29.063	70.825	27.489	1.00	19.35	A
55	ATOM	2202	CA	GLY	A	294	28.295	71.652	26.576	1.00	19.35	A
	ATOM	2203	C	GLY	A	294	27.538	70.859	25.525	1.00	19.82	A
	ATOM	2204	O	GLY	A	294	27.101	71.414	24.515	1.00	20.44	A
	ATOM	2205	N	LEU	A	295	27.386	69.558	25.757	1.00	19.26	A
	ATOM	2206	CA	LEU	A	295	26.670	68.694	24.826	1.00	18.91	A

5	ATOM	2207	CB	LEU	A	295	27.576	67.555	24.344	1.00	19.27	A
	ATOM	2208	CG	LEU	A	295	28.849	67.928	23.578	1.00	19.09	A
	ATOM	2209	CD1	LEU	A	295	29.678	66.677	23.321	1.00	19.10	A
	ATOM	2210	CD2	LEU	A	295	28.479	68.607	22.261	1.00	19.06	A
	ATOM	2211	C	LEU	A	295	25.448	68.108	25.525	1.00	19.05	A
10	ATOM	2212	O	LEU	A	295	25.417	68.003	26.749	1.00	19.27	A
	ATOM	2213	N	SER	A	296	24.445	67.731	24.742	1.00	19.20	A
	ATOM	2214	CA	SER	A	296	23.229	67.149	25.294	1.00	19.84	A
	ATOM	2215	CB	SER	A	296	22.259	68.252	25.732	1.00	19.56	A
	ATOM	2216	OG	SER	A	296	21.869	69.062	24.637	1.00	19.91	A
15	ATOM	2217	C	SER	A	296	22.564	66.263	24.253	1.00	19.90	A
	ATOM	2218	O	SER	A	296	23.019	66.184	23.110	1.00	19.47	A
	ATOM	2219	N	CYS	A	297	21.488	65.597	24.661	1.00	20.34	A
	ATOM	2220	CA	CYS	A	297	20.741	64.713	23.776	1.00	20.55	A
	ATOM	2221	C	CYS	A	297	19.469	65.383	23.268	1.00	21.46	A
20	ATOM	2222	O	CYS	A	297	18.579	65.721	24.047	1.00	22.22	A
	ATOM	2223	CB	CYS	A	297	20.394	63.415	24.509	1.00	20.17	A
	ATOM	2224	SG	CYS	A	297	21.832	62.324	24.724	1.00	19.68	A
	ATOM	2225	N	PRO	A	298	19.368	65.583	21.946	1.00	21.80	A
	ATOM	2226	CD	PRO	A	298	20.350	65.215	20.909	1.00	21.82	A
25	ATOM	2227	CA	PRO	A	298	18.192	66.219	21.346	1.00	22.23	A
	ATOM	2228	CB	PRO	A	298	18.583	66.349	19.875	1.00	22.37	A
	ATOM	2229	CG	PRO	A	298	19.498	65.187	19.664	1.00	22.37	A
	ATOM	2230	C	PRO	A	298	16.892	65.441	21.541	1.00	22.49	A
	ATOM	2231	O	PRO	A	298	15.805	66.004	21.411	1.00	22.25	A
30	ATOM	2232	N	TRP	A	299	17.006	64.153	21.856	1.00	22.24	A
	ATOM	2233	CA	TRP	A	299	15.829	63.316	22.069	1.00	22.85	A
	ATOM	2234	CB	TRP	A	299	16.174	61.845	21.781	1.00	21.59	A
	ATOM	2235	CG	TRP	A	299	16.531	61.619	20.329	1.00	20.98	A
	ATOM	2236	CD2	TRP	A	299	17.846	61.653	19.747	1.00	20.85	A
35	ATOM	2237	CE2	TRP	A	299	17.691	61.495	18.351	1.00	20.88	A
	ATOM	2238	CE3	TRP	A	299	19.137	61.808	20.270	1.00	20.11	A
	ATOM	2239	CD1	TRP	A	299	15.660	61.438	19.288	1.00	20.52	A
	ATOM	2240	NE1	TRP	A	299	16.350	61.364	18.098	1.00	21.16	A
	ATOM	2241	CZ2	TRP	A	299	18.781	61.488	17.470	1.00	21.31	A
40	ATOM	2242	CZ3	TRP	A	299	20.221	61.801	19.394	1.00	21.02	A
	ATOM	2243	CH2	TRP	A	299	20.033	61.642	18.008	1.00	20.63	A
	ATOM	2244	C	TRP	A	299	15.264	63.495	23.483	1.00	23.67	A
	ATOM	2245	O	TRP	A	299	14.364	62.767	23.903	1.00	23.41	A
	ATOM	2246	N	LYS	A	300	15.814	64.470	24.208	1.00	24.99	A
45	ATOM	2247	CA	LYS	A	300	15.363	64.832	25.558	1.00	25.96	A
	ATOM	2248	CB	LYS	A	300	13.856	65.087	25.543	1.00	27.34	A
	ATOM	2249	CG	LYS	A	300	13.416	66.108	24.516	1.00	29.33	A
	ATOM	2250	CD	LYS	A	300	11.914	66.327	24.577	1.00	31.29	A
	ATOM	2251	CE	LYS	A	300	11.454	67.255	23.468	1.00	32.58	A
50	ATOM	2252	NZ	LYS	A	300	12.209	68.536	23.490	1.00	34.20	A
	ATOM	2253	C	LYS	A	300	15.686	63.912	26.735	1.00	25.72	A
	ATOM	2254	O	LYS	A	300	15.271	64.187	27.859	1.00	25.71	A
	ATOM	2255	N	VAL	A	301	16.401	62.821	26.493	1.00	25.17	A
	ATOM	2256	CA	VAL	A	301	16.765	61.917	27.576	1.00	24.82	A
55	ATOM	2257	CB	VAL	A	301	16.254	60.484	27.323	1.00	25.15	A
	ATOM	2258	CG1	VAL	A	301	16.543	59.615	28.533	1.00	24.99	A
	ATOM	2259	CG2	VAL	A	301	14.760	60.506	27.034	1.00	25.25	A
	ATOM	2260	C	VAL	A	301	18.287	61.906	27.672	1.00	24.84	A
	ATOM	2261	O	VAL	A	301	18.973	61.397	26.785	1.00	24.60	A

5	ATOM	2262	N	PRO	A	302	18.834	62.476	28.756	1.00	24.68	A
	ATOM	2263	CD	PRO	A	302	18.109	63.142	29.855	1.00	24.61	A
	ATOM	2264	CA	PRO	A	302	20.280	62.547	28.976	1.00	24.22	A
	ATOM	2265	CB	PRO	A	302	20.403	63.655	30.009	1.00	24.42	A
	ATOM	2266	CG	PRO	A	302	19.207	63.391	30.875	1.00	24.71	A
	ATOM	2267	C	PRO	A	302	20.904	61.253	29.470	1.00	23.88	A
	ATOM	2268	O	PRO	A	302	20.224	60.390	30.019	1.00	23.34	A
	ATOM	2269	N	PRO	A	303	22.219	61.096	29.264	1.00	23.79	A
10	ATOM	2270	CD	PRO	A	303	23.170	61.936	28.513	1.00	23.70	A
	ATOM	2271	CA	PRO	A	303	22.853	59.867	29.740	1.00	23.66	A
	ATOM	2272	CB	PRO	A	303	24.212	59.884	29.043	1.00	23.89	A
	ATOM	2273	CG	PRO	A	303	24.507	61.346	28.915	1.00	24.48	A
	ATOM	2274	C	PRO	A	303	22.968	59.964	31.258	1.00	24.01	A
15	ATOM	2275	O	PRO	A	303	23.011	61.065	31.815	1.00	23.16	A
	ATOM	2276	N	ARG	A	304	22.997	58.820	31.927	1.00	24.25	A
	ATOM	2277	CA	ARG	A	304	23.115	58.801	33.378	1.00	25.17	A
	ATOM	2278	CB	ARG	A	304	21.833	58.251	34.013	1.00	26.88	A
	ATOM	2279	CG	ARG	A	304	20.700	59.270	34.090	1.00	29.46	A
20	ATOM	2280	CD	ARG	A	304	19.390	58.630	34.533	1.00	32.28	A
	ATOM	2281	NE	ARG	A	304	18.811	57.784	33.491	1.00	34.83	A
	ATOM	2282	CZ	ARG	A	304	18.400	58.229	32.304	1.00	36.04	A
	ATOM	2283	NH1	ARG	A	304	18.501	59.518	32.000	1.00	36.26	A
	ATOM	2284	NH2	ARG	A	304	17.886	57.386	31.419	1.00	37.33	A
25	ATOM	2285	C	ARG	A	304	24.305	57.958	33.789	1.00	24.35	A
	ATOM	2286	O	ARG	A	304	24.503	56.858	33.276	1.00	23.88	A
	ATOM	2287	N	THR	A	305	25.102	58.487	34.710	1.00	23.66	A
	ATOM	2288	CA	THR	A	305	26.276	57.779	35.194	1.00	23.22	A
	ATOM	2289	CB	THR	A	305	26.918	58.528	36.375	1.00	23.98	A
30	ATOM	2290	OG1	THR	A	305	27.347	59.823	35.934	1.00	25.33	A
	ATOM	2291	CG2	THR	A	305	28.106	57.759	36.920	1.00	23.64	A
	ATOM	2292	C	THR	A	305	25.866	56.385	35.643	1.00	22.81	A
	ATOM	2293	O	THR	A	305	24.868	56.224	36.346	1.00	22.49	A
	ATOM	2294	N	ILE	A	306	26.628	55.378	35.227	1.00	22.00	A
35	ATOM	2295	CA	ILE	A	306	26.327	54.000	35.597	1.00	21.93	A
	ATOM	2296	CB	ILE	A	306	27.073	52.991	34.696	1.00	21.54	A
	ATOM	2297	CG2	ILE	A	306	26.633	51.565	35.035	1.00	21.28	A
	ATOM	2298	CG1	ILE	A	306	26.803	53.301	33.220	1.00	20.62	A
	ATOM	2299	CD1	ILE	A	306	25.337	53.240	32.822	1.00	20.14	A
40	ATOM	2300	C	ILE	A	306	26.734	53.747	37.046	1.00	22.59	A
	ATOM	2301	O	ILE	A	306	27.800	54.180	37.487	1.00	21.84	A
	ATOM	2302	N	SER	A	307	25.875	53.044	37.779	1.00	23.35	A
	ATOM	2303	CA	SER	A	307	26.132	52.716	39.178	1.00	24.13	A
	ATOM	2304	CB	SER	A	307	25.371	53.675	40.094	1.00	23.72	A
45	ATOM	2305	OG	SER	A	307	23.973	53.550	39.900	1.00	23.17	A
	ATOM	2306	C	SER	A	307	25.659	51.292	39.443	1.00	24.92	A
	ATOM	2307	O	SER	A	307	24.927	50.721	38.639	1.00	24.44	A
	ATOM	2308	N	ASP	A	308	26.079	50.719	40.567	1.00	26.08	A
	ATOM	2309	CA	ASP	A	308	25.669	49.363	40.922	1.00	27.21	A
50	ATOM	2310	CB	ASP	A	308	26.296	48.955	42.257	1.00	28.74	A
	ATOM	2311	CG	ASP	A	308	27.785	48.707	42.148	1.00	30.44	A
	ATOM	2312	OD1	ASP	A	308	28.394	49.166	41.160	1.00	31.50	A
	ATOM	2313	OD2	ASP	A	308	28.351	48.060	43.055	1.00	32.13	A
	ATOM	2314	C	ASP	A	308	24.152	49.325	41.040	1.00	26.58	A
55	ATOM	2315	O	ASP	A	308	23.522	48.284	40.858	1.00	26.24	A
	ATOM	2316	N	GLN	A	309	23.582	50.487	41.331	1.00	26.55	A

5	ATOM	2317	CA	GLN	A	309	22.147	50.651	41.504	1.00	26.62	A
	ATOM	2318	CB	GLN	A	309	21.899	51.936	42.306	1.00	28.47	A
	ATOM	2319	CG	GLN	A	309	20.524	52.551	42.178	1.00	30.34	A
	ATOM	2320	CD	GLN	A	309	20.373	53.799	43.039	1.00	32.12	A
	ATOM	2321	OE1	GLN	A	309	19.548	54.672	42.757	1.00	32.61	A
10	ATOM	2322	NE2	GLN	A	309	21.166	53.881	44.102	1.00	32.15	A
	ATOM	2323	C	GLN	A	309	21.331	50.654	40.210	1.00	25.60	A
	ATOM	2324	O	GLN	A	309	20.210	50.148	40.189	1.00	26.28	A
	ATOM	2325	N	ASN	A	310	21.881	51.205	39.131	1.00	23.60	A
	ATOM	2326	CA	ASN	A	310	21.142	51.251	37.870	1.00	22.29	A
15	ATOM	2327	CB	ASN	A	310	20.991	52.700	37.388	1.00	21.33	A
	ATOM	2328	CG	ASN	A	310	22.324	53.345	37.034	1.00	20.86	A
	ATOM	2329	OD1	ASN	A	310	23.260	52.670	36.606	1.00	19.45	A
	ATOM	2330	ND2	ASN	A	310	22.407	54.661	37.195	1.00	20.66	A
	ATOM	2331	C	ASN	A	310	21.744	50.429	36.734	1.00	21.87	A
20	ATOM	2332	O	ASN	A	310	21.162	50.356	35.656	1.00	21.72	A
	ATOM	2333	N	VAL	A	311	22.897	49.811	36.970	1.00	21.87	A
	ATOM	2334	CA	VAL	A	311	23.572	49.035	35.929	1.00	21.29	A
	ATOM	2335	CB	VAL	A	311	24.907	48.445	36.446	1.00	21.36	A
	ATOM	2336	CG1	VAL	A	311	24.639	47.333	37.448	1.00	21.68	A
25	ATOM	2337	CG2	VAL	A	311	25.746	47.940	35.270	1.00	20.87	A
	ATOM	2338	C	VAL	A	311	22.741	47.912	35.302	1.00	21.68	A
	ATOM	2339	O	VAL	A	311	22.857	47.652	34.104	1.00	20.40	A
	ATOM	2340	N	ALA	A	312	21.906	47.247	36.095	1.00	20.96	A
	ATOM	2341	CA	ALA	A	312	21.083	46.167	35.557	1.00	21.12	A
30	ATOM	2342	CB	ALA	A	312	20.368	45.424	36.692	1.00	21.66	A
	ATOM	2343	C	ALA	A	312	20.065	46.698	34.552	1.00	21.29	A
	ATOM	2344	O	ALA	A	312	19.860	46.103	33.493	1.00	21.31	A
	ATOM	2345	N	ALA	A	313	19.431	47.821	34.885	1.00	21.28	A
	ATOM	2346	CA	ALA	A	313	18.431	48.434	34.014	1.00	21.25	A
35	ATOM	2347	CB	ALA	A	313	17.637	49.478	34.785	1.00	20.73	A
	ATOM	2348	C	ALA	A	313	19.078	49.077	32.789	1.00	21.41	A
	ATOM	2349	O	ALA	A	313	18.547	49.003	31.679	1.00	20.99	A
	ATOM	2350	N	ARG	A	314	20.218	49.722	33.000	1.00	21.35	A
	ATOM	2351	CA	ARG	A	314	20.934	50.365	31.901	1.00	21.81	A
40	ATOM	2352	CB	ARG	A	314	22.138	51.139	32.444	1.00	21.63	A
	ATOM	2353	CG	ARG	A	314	21.790	52.300	33.368	1.00	21.97	A
	ATOM	2354	CD	ARG	A	314	21.440	53.566	32.596	1.00	22.71	A
	ATOM	2355	NE	ARG	A	314	20.076	53.563	32.081	1.00	23.17	A
	ATOM	2356	CZ	ARG	A	314	19.589	54.488	31.260	1.00	23.56	A
45	ATOM	2357	NH1	ARG	A	314	20.357	55.490	30.854	1.00	24.71	A
	ATOM	2358	NH2	ARG	A	314	18.330	54.422	30.855	1.00	23.76	A
	ATOM	2359	C	ARG	A	314	21.406	49.299	30.911	1.00	21.67	A
	ATOM	2360	O	ARG	A	314	21.304	49.476	29.695	1.00	21.54	A
	ATOM	2361	N	SER	A	315	21.912	48.190	31.441	1.00	21.71	A
50	ATOM	2362	CA	SER	A	315	22.399	47.088	30.612	1.00	22.55	A
	ATOM	2363	CB	SER	A	315	23.062	46.016	31.481	1.00	21.53	A
	ATOM	2364	OG	SER	A	315	24.246	46.507	32.082	1.00	21.43	A
	ATOM	2365	C	SER	A	315	21.266	46.461	29.815	1.00	23.17	A
	ATOM	2366	O	SER	A	315	21.424	46.141	28.637	1.00	23.47	A
55	ATOM	2367	N	ASP	A	316	20.118	46.287	30.459	1.00	23.63	A
	ATOM	2368	CA	ASP	A	316	18.971	45.694	29.789	1.00	24.11	A
	ATOM	2369	CB	ASP	A	316	17.790	45.597	30.759	1.00	26.34	A
	ATOM	2370	CG	ASP	A	316	16.723	44.632	30.283	1.00	28.47	A
	ATOM	2371	OD1	ASP	A	316	17.060	43.467	29.973	1.00	29.91	A

5	ATOM	2372	OD2	ASP	A	316	15.544	45.037	30.226	1.00	29.93	A
	ATOM	2373	C	ASP	A	316	18.604	46.543	28.573	1.00	23.57	A
	ATOM	2374	O	ASP	A	316	18.309	46.012	27.502	1.00	23.16	A
	ATOM	2375	N	LEU	A	317	18.635	47.863	28.737	1.00	22.39	A
	ATOM	2376	CA	LEU	A	317	18.321	48.769	27.637	1.00	21.62	A
	ATOM	2377	CB	LEU	A	317	18.253	50.217	28.132	1.00	22.62	A
	ATOM	2378	CG	LEU	A	317	16.882	50.779	28.506	1.00	23.63	A
	ATOM	2379	CD1	LEU	A	317	17.055	52.191	29.061	1.00	24.97	A
10	ATOM	2380	CD2	LEU	A	317	15.978	50.796	27.281	1.00	23.92	A
	ATOM	2381	C	LEU	A	317	19.364	48.682	26.529	1.00	20.23	A
	ATOM	2382	O	LEU	A	317	19.024	48.571	25.352	1.00	19.59	A
	ATOM	2383	N	LEU	A	318	20.634	48.735	26.915	1.00	19.08	A
15	ATOM	2384	CA	LEU	A	318	21.726	48.690	25.948	1.00	18.36	A
	ATOM	2385	CB	LEU	A	318	23.061	48.959	26.647	1.00	17.32	A
	ATOM	2386	CG	LEU	A	318	24.279	49.101	25.727	1.00	17.28	A
	ATOM	2387	CD1	LEU	A	318	24.040	50.232	24.732	1.00	16.94	A
	ATOM	2388	CD2	LEU	A	318	25.527	49.370	26.563	1.00	16.17	A
20	ATOM	2389	C	LEU	A	318	21.797	47.361	25.208	1.00	18.02	A
	ATOM	2390	O	LEU	A	318	21.841	47.326	23.977	1.00	17.93	A
	ATOM	2391	N	VAL	A	319	21.816	46.265	25.958	1.00	17.30	A
	ATOM	2392	CA	VAL	A	319	21.883	44.948	25.343	1.00	17.29	A
	ATOM	2393	CB	VAL	A	319	21.822	43.835	26.408	1.00	17.01	A
	ATOM	2394	CG1	VAL	A	319	21.644	42.479	25.742	1.00	17.97	A
25	ATOM	2395	CG2	VAL	A	319	23.103	43.843	27.232	1.00	17.03	A
	ATOM	2396	C	VAL	A	319	20.743	44.768	24.345	1.00	16.94	A
	ATOM	2397	O	VAL	A	319	20.925	44.167	23.289	1.00	17.15	A
	ATOM	2398	N	ASP	A	320	19.571	45.301	24.671	1.00	16.74	A
30	ATOM	2399	CA	ASP	A	320	18.422	45.186	23.776	1.00	16.82	A
	ATOM	2400	CB	ASP	A	320	17.181	45.794	24.433	1.00	18.14	A
	ATOM	2401	CG	ASP	A	320	15.978	45.788	23.521	1.00	17.78	A
	ATOM	2402	OD1	ASP	A	320	15.529	46.885	23.129	1.00	18.82	A
	ATOM	2403	OD2	ASP	A	320	15.482	44.690	23.195	1.00	19.23	A
35	ATOM	2404	C	ASP	A	320	18.717	45.878	22.444	1.00	16.65	A
	ATOM	2405	O	ASP	A	320	18.351	45.380	21.379	1.00	15.66	A
	ATOM	2406	N	GLN	A	321	19.377	47.031	22.508	1.00	16.01	A
	ATOM	2407	CA	GLN	A	321	19.741	47.762	21.297	1.00	15.56	A
	ATOM	2408	CB	GLN	A	321	20.367	49.113	21.652	1.00	15.14	A
	ATOM	2409	CG	GLN	A	321	19.358	50.150	22.095	1.00	15.99	A
40	ATOM	2410	CD	GLN	A	321	18.322	50.421	21.027	1.00	16.42	A
	ATOM	2411	OE1	GLN	A	321	18.652	50.847	19.917	1.00	15.10	A
	ATOM	2412	NE2	GLN	A	321	17.060	50.170	21.352	1.00	16.60	A
	ATOM	2413	C	GLN	A	321	20.742	46.937	20.501	1.00	15.56	A
	ATOM	2414	O	GLN	A	321	20.632	46.816	19.280	1.00	15.19	A
45	ATOM	2415	N	TRP	A	322	21.722	46.372	21.203	1.00	15.41	A
	ATOM	2416	CA	TRP	A	322	22.742	45.550	20.565	1.00	15.95	A
	ATOM	2417	CB	TRP	A	322	23.751	45.031	21.594	1.00	15.32	A
	ATOM	2418	CG	TRP	A	322	24.698	46.063	22.138	1.00	16.14	A
	ATOM	2419	CD2	TRP	A	322	25.591	45.900	23.246	1.00	16.10	A
50	ATOM	2420	CE2	TRP	A	322	26.331	47.097	23.369	1.00	16.22	A
	ATOM	2421	CE3	TRP	A	322	25.839	44.856	24.148	1.00	16.86	A
	ATOM	2422	CD1	TRP	A	322	24.922	47.316	21.649	1.00	16.34	A
	ATOM	2423	NE1	TRP	A	322	25.904	47.945	22.382	1.00	16.27	A
	ATOM	2424	CZ2	TRP	A	322	27.303	47.280	24.360	1.00	16.63	A
55	ATOM	2425	CZ3	TRP	A	322	26.807	45.037	25.134	1.00	16.10	A
	ATOM	2426	CH2	TRP	A	322	27.526	46.240	25.231	1.00	16.78	A

5	ATOM	2427	C	TRP	A	322	22.136	44.356	19.834	1.00	16.03	A
	ATOM	2428	O	TRP	A	322	22.475	44.088	18.681	1.00	15.82	A
	ATOM	2429	N	LYS	A	323	21.249	43.632	20.510	1.00	15.91	A
	ATOM	2430	CA	LYS	A	323	20.624	42.466	19.897	1.00	16.68	A
	ATOM	2431	CB	LYS	A	323	19.824	41.683	20.942	1.00	16.48	A
10	ATOM	2432	CG	LYS	A	323	20.741	40.900	21.882	1.00	17.56	A
	ATOM	2433	CD	LYS	A	323	19.971	40.046	22.879	1.00	19.27	A
	ATOM	2434	CE	LYS	A	323	20.935	39.208	23.709	1.00	19.50	A
	ATOM	2435	NZ	LYS	A	323	20.226	38.348	24.692	1.00	21.53	A
	ATOM	2436	C	LYS	A	323	19.759	42.833	18.699	1.00	16.16	A
15	ATOM	2437	O	LYS	A	323	19.619	42.046	17.766	1.00	16.35	A
	ATOM	2438	N	LYS	A	324	19.183	44.029	18.713	1.00	16.26	A
	ATOM	2439	CA	LYS	A	324	18.377	44.460	17.579	1.00	15.66	A
	ATOM	2440	CB	LYS	A	324	17.549	45.694	17.943	1.00	15.63	A
	ATOM	2441	CG	LYS	A	324	16.381	45.363	18.866	1.00	17.11	A
20	ATOM	2442	CD	LYS	A	324	15.589	46.597	19.275	1.00	17.10	A
	ATOM	2443	CE	LYS	A	324	14.397	46.197	20.148	1.00	17.89	A
	ATOM	2444	NZ	LYS	A	324	13.676	47.384	20.691	1.00	18.13	A
	ATOM	2445	C	LYS	A	324	19.312	44.757	16.412	1.00	15.66	A
	ATOM	2446	O	LYS	A	324	19.040	44.376	15.273	1.00	15.11	A
25	ATOM	2447	N	LYS	A	325	20.429	45.422	16.696	1.00	14.87	A
	ATOM	2448	CA	LYS	A	325	21.391	45.733	15.643	1.00	14.73	A
	ATOM	2449	CB	LYS	A	325	22.545	46.579	16.198	1.00	13.74	A
	ATOM	2450	CG	LYS	A	325	23.442	47.177	15.118	1.00	13.46	A
	ATOM	2451	CD	LYS	A	325	24.584	48.006	15.707	1.00	12.93	A
30	ATOM	2452	CE	LYS	A	325	25.403	48.663	14.600	1.00	13.37	A
	ATOM	2453	NZ	LYS	A	325	26.596	49.381	15.126	1.00	13.83	A
	ATOM	2454	C	LYS	A	325	21.938	44.422	15.074	1.00	15.45	A
	ATOM	2455	O	LYS	A	325	22.105	44.279	13.862	1.00	15.46	A
	ATOM	2456	N	ALA	A	326	22.202	43.464	15.961	1.00	15.77	A
35	ATOM	2457	CA	ALA	A	326	22.733	42.159	15.570	1.00	16.36	A
	ATOM	2458	CB	ALA	A	326	22.977	41.306	16.812	1.00	16.30	A
	ATOM	2459	C	ALA	A	326	21.835	41.400	14.589	1.00	16.25	A
	ATOM	2460	O	ALA	A	326	22.311	40.550	13.834	1.00	16.73	A
	ATOM	2461	N	GLU	A	327	20.541	41.697	14.605	1.00	16.39	A
40	ATOM	2462	CA	GLU	A	327	19.601	41.030	13.706	1.00	16.62	A
	ATOM	2463	CB	GLU	A	327	18.162	41.372	14.090	1.00	17.67	A
	ATOM	2464	CG	GLU	A	327	17.628	40.572	15.251	1.00	19.60	A
	ATOM	2465	CD	GLU	A	327	17.582	39.087	14.945	1.00	19.61	A
	ATOM	2466	OE1	GLU	A	327	16.906	38.699	13.970	1.00	20.21	A
45	ATOM	2467	OE2	GLU	A	327	18.224	38.312	15.678	1.00	19.93	A
	ATOM	2468	C	GLU	A	327	19.820	41.409	12.247	1.00	16.26	A
	ATOM	2469	O	GLU	A	327	19.375	40.705	11.341	1.00	16.58	A
	ATOM	2470	N	LEU	A	328	20.505	42.525	12.022	1.00	15.87	A
	ATOM	2471	CA	LEU	A	328	20.749	42.991	10.667	1.00	14.87	A
50	ATOM	2472	CB	LEU	A	328	20.909	44.517	10.660	1.00	14.25	A
	ATOM	2473	CG	LEU	A	328	19.804	45.322	11.357	1.00	14.52	A
	ATOM	2474	CD1	LEU	A	328	20.035	46.811	11.130	1.00	13.79	A
	ATOM	2475	CD2	LEU	A	328	18.435	44.905	10.826	1.00	14.50	A
	ATOM	2476	C	LEU	A	328	21.968	42.337	10.026	1.00	14.72	A
55	ATOM	2477	O	LEU	A	328	22.224	42.542	8.840	1.00	15.39	A
	ATOM	2478	N	TYR	A	329	22.713	41.550	10.803	1.00	14.33	A
	ATOM	2479	CA	TYR	A	329	23.906	40.874	10.292	1.00	14.79	A
	ATOM	2480	CB	TYR	A	329	25.164	41.451	10.953	1.00	14.59	A
	ATOM	2481	CG	TYR	A	329	25.358	42.921	10.635	1.00	14.92	A

5	ATOM	2482	CD1	TYR	A	329	24.740	43.912	11.404	1.00	14.49	A
	ATOM	2483	CE1	TYR	A	329	24.861	45.262	11.075	1.00	14.49	A
	ATOM	2484	CD2	TYR	A	329	26.107	43.322	9.526	1.00	14.27	A
	ATOM	2485	CE2	TYR	A	329	26.233	44.668	9.188	1.00	14.38	A
	ATOM	2486	CZ	TYR	A	329	25.608	45.632	9.966	1.00	14.49	A
10	ATOM	2487	OH	TYR	A	329	25.722	46.963	9.632	1.00	14.95	A
	ATOM	2488	C	TYR	A	329	23.844	39.351	10.451	1.00	15.24	A
	ATOM	2489	O	TYR	A	329	22.958	38.826	11.131	1.00	15.30	A
	ATOM	2490	N	ARG	A	330	24.792	38.649	9.833	1.00	15.25	A
	ATOM	2491	CA	ARG	A	330	24.797	37.189	9.841	1.00	15.68	A
15	ATOM	2492	CB	ARG	A	330	25.167	36.688	8.439	1.00	15.44	A
	ATOM	2493	CG	ARG	A	330	24.273	37.268	7.350	1.00	15.40	A
	ATOM	2494	CD	ARG	A	330	24.497	36.617	5.990	1.00	15.70	A
	ATOM	2495	NE	ARG	A	330	23.578	37.185	5.008	1.00	16.37	A
	ATOM	2496	CZ	ARG	A	330	23.309	36.645	3.823	1.00	17.09	A
20	ATOM	2497	NH1	ARG	A	330	23.889	35.509	3.454	1.00	16.94	A
	ATOM	2498	NH2	ARG	A	330	22.446	37.239	3.007	1.00	16.97	A
	ATOM	2499	C	ARG	A	330	25.618	36.416	10.876	1.00	16.06	A
	ATOM	2500	O	ARG	A	330	25.376	35.226	11.071	1.00	16.42	A
	ATOM	2501	N	THR	A	331	26.586	37.053	11.528	1.00	16.07	A
25	ATOM	2502	CA	THR	A	331	27.382	36.329	12.521	1.00	15.58	A
	ATOM	2503	CB	THR	A	331	28.900	36.578	12.352	1.00	15.84	A
	ATOM	2504	OG1	THR	A	331	29.222	37.895	12.813	1.00	14.68	A
	ATOM	2505	CG2	THR	A	331	29.314	36.436	10.888	1.00	15.90	A
	ATOM	2506	C	THR	A	331	27.005	36.735	13.938	1.00	15.84	A
30	ATOM	2507	O	THR	A	331	26.157	37.607	14.141	1.00	15.86	A
	ATOM	2508	N	ASN	A	332	27.646	36.100	14.915	1.00	16.04	A
	ATOM	2509	CA	ASN	A	332	27.394	36.403	16.318	1.00	16.70	A
	ATOM	2510	CB	ASN	A	332	27.380	35.108	17.151	1.00	17.69	A
	ATOM	2511	CG	ASN	A	332	28.749	34.452	17.251	1.00	19.65	A
35	ATOM	2512	OD1	ASN	A	332	29.525	34.447	16.295	1.00	19.62	A
	ATOM	2513	ND2	ASN	A	332	29.043	33.876	18.416	1.00	20.32	A
	ATOM	2514	C	ASN	A	332	28.458	37.373	16.837	1.00	16.36	A
	ATOM	2515	O	ASN	A	332	28.714	37.454	18.041	1.00	16.17	A
	ATOM	2516	N	VAL	A	333	29.076	38.106	15.911	1.00	15.18	A
40	ATOM	2517	CA	VAL	A	333	30.095	39.094	16.253	1.00	14.95	A
	ATOM	2518	CB	VAL	A	333	31.409	38.846	15.476	1.00	15.34	A
	ATOM	2519	CG1	VAL	A	333	32.449	39.892	15.866	1.00	15.33	A
	ATOM	2520	CG2	VAL	A	333	31.926	37.448	15.767	1.00	15.82	A
	ATOM	2521	C	VAL	A	333	29.520	40.453	15.857	1.00	14.77	A
45	ATOM	2522	O	VAL	A	333	29.192	40.674	14.691	1.00	15.06	A
	ATOM	2523	N	LEU	A	334	29.406	41.361	16.823	1.00	13.87	A
	ATOM	2524	CA	LEU	A	334	28.814	42.670	16.568	1.00	13.41	A
	ATOM	2525	CB	LEU	A	334	27.608	42.860	17.494	1.00	13.88	A
	ATOM	2526	CG	LEU	A	334	26.789	44.140	17.337	1.00	13.89	A
50	ATOM	2527	CD1	LEU	A	334	26.070	44.123	15.992	1.00	14.77	A
	ATOM	2528	CD2	LEU	A	334	25.787	44.244	18.479	1.00	13.69	A
	ATOM	2529	C	LEU	A	334	29.758	43.865	16.720	1.00	13.04	A
	ATOM	2530	O	LEU	A	334	30.475	43.981	17.713	1.00	12.82	A
	ATOM	2531	N	LEU	A	335	29.735	44.758	15.735	1.00	12.97	A
55	ATOM	2532	CA	LEU	A	335	30.579	45.954	15.759	1.00	12.73	A
	ATOM	2533	CB	LEU	A	335	31.079	46.285	14.349	1.00	12.26	A
	ATOM	2534	CG	LEU	A	335	31.843	47.608	14.216	1.00	12.34	A
	ATOM	2535	CD1	LEU	A	335	33.151	47.533	14.988	1.00	12.28	A
	ATOM	2536	CD2	LEU	A	335	32.107	47.900	12.749	1.00	12.78	A

5	ATOM	2537	C	LEU	A	335	29.795	47.144	16.299	1.00	12.79	A
	ATOM	2538	O	LEU	A	335	28.723	47.466	15.793	1.00	13.65	A
	ATOM	2539	N	ILE	A	336	30.337	47.797	17.324	1.00	12.68	A
	ATOM	2540	CA	ILE	A	336	29.694	48.961	17.925	1.00	12.47	A
	ATOM	2541	CB	ILE	A	336	29.181	48.659	19.366	1.00	11.61	A
10	ATOM	2542	CG2	ILE	A	336	28.538	49.904	19.969	1.00	12.59	A
	ATOM	2543	CG1	ILE	A	336	28.157	47.516	19.342	1.00	12.32	A
	ATOM	2544	CD1	ILE	A	336	26.853	47.851	18.625	1.00	12.23	A
	ATOM	2545	C	ILE	A	336	30.679	50.127	18.003	1.00	12.15	A
	ATOM	2546	O	ILE	A	336	31.429	50.253	18.965	1.00	12.42	A
15	ATOM	2547	N	PRO	A	337	30.710	50.981	16.970	1.00	12.21	A
	ATOM	2548	CD	PRO	A	337	30.050	50.890	15.657	1.00	11.90	A
	ATOM	2549	CA	PRO	A	337	31.636	52.118	17.017	1.00	12.00	A
	ATOM	2550	CB	PRO	A	337	31.406	52.809	15.674	1.00	11.62	A
	ATOM	2551	CG	PRO	A	337	30.989	51.687	14.776	1.00	11.75	A
20	ATOM	2552	C	PRO	A	337	31.255	53.032	18.181	1.00	11.64	A
	ATOM	2553	O	PRO	A	337	30.079	53.141	18.521	1.00	12.05	A
	ATOM	2554	N	LEU	A	338	32.247	53.678	18.789	1.00	11.36	A
	ATOM	2555	CA	LEU	A	338	31.991	54.601	19.894	1.00	12.19	A
	ATOM	2556	CB	LEU	A	338	32.392	53.982	21.239	1.00	11.63	A
25	ATOM	2557	CG	LEU	A	338	32.104	54.867	22.461	1.00	12.93	A
	ATOM	2558	CD1	LEU	A	338	30.602	54.924	22.705	1.00	12.80	A
	ATOM	2559	CD2	LEU	A	338	32.820	54.318	23.695	1.00	12.39	A
	ATOM	2560	C	LEU	A	338	32.800	55.874	19.670	1.00	12.31	A
	ATOM	2561	O	LEU	A	338	33.941	55.967	20.107	1.00	13.27	A
30	ATOM	2562	N	GLY	A	339	32.208	56.850	18.987	1.00	12.98	A
	ATOM	2563	CA	GLY	A	339	32.922	58.092	18.734	1.00	12.65	A
	ATOM	2564	C	GLY	A	339	32.129	59.114	17.943	1.00	13.02	A
	ATOM	2565	O	GLY	A	339	30.971	58.888	17.591	1.00	13.12	A
	ATOM	2566	N	ASP	A	340	32.768	60.245	17.660	1.00	12.52	A
35	ATOM	2567	CA	ASP	A	340	32.141	61.331	16.921	1.00	12.74	A
	ATOM	2568	CB	ASP	A	340	31.162	62.075	17.831	1.00	12.87	A
	ATOM	2569	CG	ASP	A	340	30.042	62.758	17.065	1.00	13.84	A
	ATOM	2570	OD1	ASP	A	340	30.240	63.114	15.881	1.00	14.29	A
	ATOM	2571	OD2	ASP	A	340	28.961	62.954	17.662	1.00	13.88	A
40	ATOM	2572	C	ASP	A	340	33.265	62.273	16.475	1.00	12.96	A
	ATOM	2573	O	ASP	A	340	34.445	61.955	16.636	1.00	12.55	A
	ATOM	2574	N	ASP	A	341	32.903	63.432	15.935	1.00	12.80	A
	ATOM	2575	CA	ASP	A	341	33.898	64.397	15.466	1.00	13.10	A
	ATOM	2576	CB	ASP	A	341	33.214	65.596	14.801	1.00	12.71	A
45	ATOM	2577	CG	ASP	A	341	32.535	65.232	13.494	1.00	12.61	A
	ATOM	2578	OD1	ASP	A	341	32.480	64.029	13.170	1.00	12.74	A
	ATOM	2579	OD2	ASP	A	341	32.057	66.153	12.796	1.00	12.47	A
	ATOM	2580	C	ASP	A	341	34.809	64.909	16.573	1.00	12.92	A
	ATOM	2581	O	ASP	A	341	34.341	65.381	17.611	1.00	13.34	A
50	ATOM	2582	N	PHE	A	342	36.113	64.815	16.330	1.00	12.69	A
	ATOM	2583	CA	PHE	A	342	37.127	65.274	17.265	1.00	12.79	A
	ATOM	2584	CB	PHE	A	342	37.318	66.788	17.123	1.00	12.64	A
	ATOM	2585	CG	PHE	A	342	37.856	67.209	15.779	1.00	12.64	A
	ATOM	2586	CD1	PHE	A	342	36.992	67.542	14.737	1.00	13.03	A
55	ATOM	2587	CD2	PHE	A	342	39.230	67.258	15.551	1.00	13.23	A
	ATOM	2588	CE1	PHE	A	342	37.487	67.920	13.486	1.00	12.67	A
	ATOM	2589	CE2	PHE	A	342	39.737	67.633	14.306	1.00	13.15	A
	ATOM	2590	CZ	PHE	A	342	38.863	67.965	13.271	1.00	13.27	A
	ATOM	2591	C	PHE	A	342	36.831	64.917	18.718	1.00	13.53	A

5	ATOM	2592	O	PHE	A	342	36.970	65.752	19.618	1.00	12.91	A
	ATOM	2593	N	ARG	A	343	36.428	63.669	18.937	1.00	13.14	A
	ATOM	2594	CA	ARG	A	343	36.133	63.188	20.279	1.00	14.72	A
	ATOM	2595	CB	ARG	A	343	35.127	62.032	20.227	1.00	14.28	A
	ATOM	2596	CG	ARG	A	343	33.681	62.469	20.032	1.00	15.00	A
10	ATOM	2597	CD	ARG	A	343	33.260	63.441	21.137	1.00	14.90	A
	ATOM	2598	NE	ARG	A	343	31.833	63.745	21.098	1.00	15.26	A
	ATOM	2599	CZ	ARG	A	343	30.891	63.011	21.682	1.00	15.55	A
	ATOM	2600	NH1	ARG	A	343	31.216	61.916	22.360	1.00	13.99	A
	ATOM	2601	NH2	ARG	A	343	29.619	63.377	21.592	1.00	15.63	A
15	ATOM	2602	C	ARG	A	343	37.398	62.727	20.994	1.00	14.93	A
	ATOM	2603	O	ARG	A	343	38.469	62.616	20.390	1.00	14.45	A
	ATOM	2604	N	PHE	A	344	37.253	62.456	22.287	1.00	16.04	A
	ATOM	2605	CA	PHE	A	344	38.349	62.006	23.138	1.00	16.71	A
	ATOM	2606	CB	PHE	A	344	38.863	60.647	22.662	1.00	16.44	A
20	ATOM	2607	CG	PHE	A	344	37.857	59.550	22.817	1.00	16.53	A
	ATOM	2608	CD1	PHE	A	344	37.093	59.128	21.735	1.00	15.84	A
	ATOM	2609	CD2	PHE	A	344	37.624	58.979	24.067	1.00	16.99	A
	ATOM	2610	CE1	PHE	A	344	36.110	58.157	21.893	1.00	16.36	A
	ATOM	2611	CE2	PHE	A	344	36.643	58.006	24.235	1.00	16.62	A
25	ATOM	2612	CZ	PHE	A	344	35.883	57.595	23.144	1.00	16.74	A
	ATOM	2613	C	PHE	A	344	39.484	63.009	23.223	1.00	17.76	A
	ATOM	2614	O	PHE	A	344	40.659	62.659	23.087	1.00	17.64	A
	ATOM	2615	N	LYS	A	345	39.110	64.259	23.478	1.00	18.99	A
	ATOM	2616	CA	LYS	A	345	40.055	65.358	23.593	1.00	20.91	A
30	ATOM	2617	CB	LYS	A	345	39.408	66.638	23.064	1.00	21.42	A
	ATOM	2618	CG	LYS	A	345	40.277	67.872	23.144	1.00	22.74	A
	ATOM	2619	CD	LYS	A	345	39.499	69.088	22.660	1.00	24.20	A
	ATOM	2620	CE	LYS	A	345	40.312	70.360	22.774	1.00	24.77	A
	ATOM	2621	NZ	LYS	A	345	39.503	71.536	22.349	1.00	26.64	A
35	ATOM	2622	C	LYS	A	345	40.500	65.568	25.041	1.00	21.83	A
	ATOM	2623	O	LYS	A	345	41.691	65.570	25.333	1.00	23.15	A
	ATOM	2624	N	GLN	A	346	39.539	65.734	25.943	1.00	22.48	A
	ATOM	2625	CA	GLN	A	346	39.835	65.967	27.353	1.00	23.29	A
	ATOM	2626	CB	GLN	A	346	38.714	66.797	27.977	1.00	24.88	A
40	ATOM	2627	CG	GLN	A	346	38.454	68.110	27.271	1.00	27.88	A
	ATOM	2628	CD	GLN	A	346	37.092	68.679	27.605	1.00	29.73	A
	ATOM	2629	OE1	GLN	A	346	36.791	68.960	28.767	1.00	32.34	A
	ATOM	2630	NE2	GLN	A	346	36.253	68.847	26.585	1.00	30.40	A
	ATOM	2631	C	GLN	A	346	40.008	64.682	28.158	1.00	22.88	A
45	ATOM	2632	O	GLN	A	346	39.354	63.675	27.887	1.00	21.72	A
	ATOM	2633	N	ASN	A	347	40.887	64.725	29.156	1.00	22.84	A
	ATOM	2634	CA	ASN	A	347	41.121	63.566	30.012	1.00	23.28	A
	ATOM	2635	CB	ASN	A	347	42.124	63.903	31.120	1.00	25.05	A
	ATOM	2636	CG	ASN	A	347	43.495	64.219	30.584	1.00	27.25	A
50	ATOM	2637	OD1	ASN	A	347	44.103	63.404	29.891	1.00	28.96	A
	ATOM	2638	ND2	ASN	A	347	43.999	65.410	30.902	1.00	28.82	A
	ATOM	2639	C	ASN	A	347	39.804	63.156	30.651	1.00	21.95	A
	ATOM	2640	O	ASN	A	347	39.491	61.969	30.759	1.00	21.83	A
	ATOM	2641	N	THR	A	348	39.037	64.154	31.077	1.00	20.97	A
55	ATOM	2642	CA	THR	A	348	37.752	63.912	31.711	1.00	20.12	A
	ATOM	2643	CB	THR	A	348	37.073	65.235	32.104	1.00	21.04	A
	ATOM	2644	OG1	THR	A	348	37.007	66.100	30.961	1.00	22.00	A
	ATOM	2645	CG2	THR	A	348	37.857	65.921	33.216	1.00	21.79	A
	ATOM	2646	C	THR	A	348	36.837	63.129	30.781	1.00	19.30	A

	ATOM	2647	O	THR	A	348	36.039	62.306	31.233	1.00	18.30	A
	ATOM	2648	N	GLU	A	349	36.960	63.381	29.479	1.00	17.43	A
	ATOM	2649	CA	GLU	A	349	36.142	62.674	28.500	1.00	17.07	A
5	ATOM	2650	CB	GLU	A	349	36.267	63.306	27.110	1.00	16.61	A
	ATOM	2651	CG	GLU	A	349	35.463	62.551	26.052	1.00	16.75	A
	ATOM	2652	CD	GLU	A	349	35.593	63.135	24.657	1.00	15.83	A
	ATOM	2653	OE1	GLU	A	349	35.037	62.529	23.717	1.00	15.90	A
	ATOM	2654	OE2	GLU	A	349	36.242	64.188	24.498	1.00	16.08	A
10	ATOM	2655	C	GLU	A	349	36.554	61.207	28.423	1.00	16.51	A
	ATOM	2656	O	GLU	A	349	35.700	60.323	28.379	1.00	16.14	A
	ATOM	2657	N	TRP	A	350	37.859	60.946	28.394	1.00	16.19	A
	ATOM	2658	CA	TRP	A	350	38.334	59.570	28.338	1.00	16.10	A
	ATOM	2659	CB	TRP	A	350	39.864	59.509	28.341	1.00	15.20	A
15	ATOM	2660	CG	TRP	A	350	40.487	59.770	27.003	1.00	15.14	A
	ATOM	2661	CD2	TRP	A	350	40.782	58.797	25.996	1.00	15.64	A
	ATOM	2662	CE2	TRP	A	350	41.322	59.490	24.888	1.00	14.56	A
	ATOM	2663	CE3	TRP	A	350	40.643	57.404	25.920	1.00	15.02	A
	ATOM	2664	CD1	TRP	A	350	40.850	60.983	26.481	1.00	15.56	A
20	ATOM	2665	NE1	TRP	A	350	41.352	60.821	25.212	1.00	14.85	A
	ATOM	2666	CZ2	TRP	A	350	41.719	58.837	23.718	1.00	14.95	A
	ATOM	2667	CZ3	TRP	A	350	41.039	56.754	24.754	1.00	15.06	A
	ATOM	2668	CH2	TRP	A	350	41.570	57.471	23.669	1.00	15.38	A
	ATOM	2669	C	TRP	A	350	37.798	58.801	29.539	1.00	16.58	A
25	ATOM	2670	O	TRP	A	350	37.298	57.683	29.404	1.00	15.92	A
	ATOM	2671	N	ASP	A	351	37.901	59.411	30.714	1.00	17.32	A
	ATOM	2672	CA	ASP	A	351	37.428	58.774	31.937	1.00	18.70	A
	ATOM	2673	CB	ASP	A	351	37.735	59.641	33.162	1.00	19.65	A
	ATOM	2674	CG	ASP	A	351	39.210	59.706	33.481	1.00	21.48	A
30	ATOM	2675	OD1	ASP	A	351	39.918	58.701	33.264	1.00	22.62	A
	ATOM	2676	OD2	ASP	A	351	39.656	60.762	33.970	1.00	23.82	A
	ATOM	2677	C	ASP	A	351	35.938	58.481	31.931	1.00	18.28	A
	ATOM	2678	O	ASP	A	351	35.519	57.360	32.238	1.00	18.60	A
	ATOM	2679	N	VAL	A	352	35.134	59.484	31.589	1.00	18.03	A
35	ATOM	2680	CA	VAL	A	352	33.691	59.309	31.606	1.00	17.92	A
	ATOM	2681	CB	VAL	A	352	32.958	60.655	31.351	1.00	18.50	A
	ATOM	2682	CG1	VAL	A	352	32.882	60.956	29.862	1.00	18.78	A
	ATOM	2683	CG2	VAL	A	352	31.578	60.619	31.986	1.00	19.34	A
	ATOM	2684	C	VAL	A	352	33.198	58.236	30.633	1.00	17.67	A
40	ATOM	2685	O	VAL	A	352	32.236	57.526	30.927	1.00	16.91	A
	ATOM	2686	N	GLN	A	353	33.850	58.103	29.482	1.00	16.45	A
	ATOM	2687	CA	GLN	A	353	33.436	57.080	28.528	1.00	15.95	A
	ATOM	2688	CB	GLN	A	353	33.941	57.415	27.114	1.00	16.08	A
	ATOM	2689	CG	GLN	A	353	33.384	58.719	26.529	1.00	16.37	A
45	ATOM	2690	CD	GLN	A	353	31.939	58.608	26.049	1.00	17.19	A
	ATOM	2691	OE1	GLN	A	353	31.114	57.935	26.666	1.00	16.64	A
	ATOM	2692	NE2	GLN	A	353	31.626	59.291	24.948	1.00	16.97	A
	ATOM	2693	C	GLN	A	353	33.960	55.705	28.964	1.00	15.87	A
	ATOM	2694	O	GLN	A	353	33.206	54.732	28.994	1.00	16.13	A
50	ATOM	2695	N	ARG	A	354	35.242	55.627	29.317	1.00	15.43	A
	ATOM	2696	CA	ARG	A	354	35.837	54.356	29.732	1.00	15.91	A
	ATOM	2697	CB	ARG	A	354	37.353	54.498	29.916	1.00	15.77	A
	ATOM	2698	CG	ARG	A	354	38.025	53.234	30.454	1.00	16.60	A
	ATOM	2699	CD	ARG	A	354	39.527	53.419	30.652	1.00	17.32	A
	ATOM	2700	NE	ARG	A	354	39.844	54.426	31.664	1.00	18.44	A
55	ATOM	2701	CZ	ARG	A	354	39.642	54.276	32.971	1.00	18.97	A

5	ATOM	2702	NH1	ARG	A	354	39.118	53.153	33.444	1.00	18.45	A
	ATOM	2703	NH2	ARG	A	354	39.974	55.248	33.810	1.00	18.25	A
	ATOM	2704	C	ARG	A	354	35.247	53.756	31.006	1.00	16.32	A
	ATOM	2705	O	ARG	A	354	34.881	52.581	31.029	1.00	15.52	A
	ATOM	2706	N	VAL	A	355	35.159	54.560	32.064	1.00	16.75	A
10	ATOM	2707	CA	VAL	A	355	34.639	54.079	33.342	1.00	17.22	A
	ATOM	2708	CB	VAL	A	355	34.705	55.184	34.422	1.00	18.19	A
	ATOM	2709	CG1	VAL	A	355	34.034	54.706	35.705	1.00	18.85	A
	ATOM	2710	CG2	VAL	A	355	36.162	55.543	34.705	1.00	18.06	A
	ATOM	2711	C	VAL	A	355	33.211	53.553	33.258	1.00	17.38	A
15	ATOM	2712	O	VAL	A	355	32.913	52.457	33.742	1.00	16.87	A
	ATOM	2713	N	ASN	A	356	32.324	54.328	32.647	1.00	16.91	A
	ATOM	2714	CA	ASN	A	356	30.942	53.899	32.527	1.00	16.67	A
	ATOM	2715	CB	ASN	A	356	30.091	55.030	31.957	1.00	16.65	A
	ATOM	2716	CG	ASN	A	356	29.787	56.091	32.994	1.00	17.54	A
20	ATOM	2717	OD1	ASN	A	356	29.078	55.830	33.970	1.00	17.65	A
	ATOM	2718	ND2	ASN	A	356	30.335	57.288	32.804	1.00	15.84	A
	ATOM	2719	C	ASN	A	356	30.803	52.630	31.696	1.00	16.96	A
	ATOM	2720	O	ASN	A	356	30.013	51.749	32.035	1.00	16.52	A
	ATOM	2721	N	TYR	A	357	31.572	52.519	30.616	1.00	16.22	A
25	ATOM	2722	CA	TYR	A	357	31.492	51.316	29.799	1.00	16.78	A
	ATOM	2723	CB	TYR	A	357	32.144	51.539	28.427	1.00	15.91	A
	ATOM	2724	CG	TYR	A	357	31.149	52.056	27.414	1.00	14.97	A
	ATOM	2725	CD1	TYR	A	357	30.957	53.424	27.222	1.00	14.35	A
	ATOM	2726	CE1	TYR	A	357	29.976	53.900	26.353	1.00	14.39	A
30	ATOM	2727	CD2	TYR	A	357	30.334	51.172	26.707	1.00	15.07	A
	ATOM	2728	CE2	TYR	A	357	29.347	51.634	25.842	1.00	14.68	A
	ATOM	2729	CZ	TYR	A	357	29.172	52.998	25.670	1.00	14.63	A
	ATOM	2730	OH	TYR	A	357	28.185	53.451	24.826	1.00	14.20	A
	ATOM	2731	C	TYR	A	357	32.098	50.107	30.507	1.00	16.81	A
35	ATOM	2732	O	TYR	A	357	31.640	48.979	30.320	1.00	17.35	A
	ATOM	2733	N	GLU	A	358	33.118	50.331	31.328	1.00	17.12	A
	ATOM	2734	CA	GLU	A	358	33.720	49.223	32.067	1.00	17.90	A
	ATOM	2735	CB	GLU	A	358	34.941	49.692	32.860	1.00	18.33	A
	ATOM	2736	CG	GLU	A	358	36.183	49.960	32.018	1.00	20.36	A
40	ATOM	2737	CD	GLU	A	358	37.376	50.366	32.867	1.00	21.30	A
	ATOM	2738	OE1	GLU	A	358	37.230	50.442	34.106	1.00	23.37	A
	ATOM	2739	OE2	GLU	A	358	38.462	50.610	32.302	1.00	22.02	A
	ATOM	2740	C	GLU	A	358	32.677	48.647	33.032	1.00	18.18	A
	ATOM	2741	O	GLU	A	358	32.622	47.436	33.251	1.00	18.62	A
45	ATOM	2742	N	ARG	A	359	31.853	49.516	33.610	1.00	18.25	A
	ATOM	2743	CA	ARG	A	359	30.816	49.067	34.540	1.00	19.06	A
	ATOM	2744	CB	ARG	A	359	30.148	50.262	35.217	1.00	20.23	A
	ATOM	2745	CG	ARG	A	359	31.040	50.962	36.213	1.00	23.21	A
	ATOM	2746	CD	ARG	A	359	30.417	52.260	36.691	1.00	25.64	A
50	ATOM	2747	NE	ARG	A	359	31.326	52.987	37.572	1.00	27.54	A
	ATOM	2748	CZ	ARG	A	359	31.389	54.312	37.640	1.00	28.87	A
	ATOM	2749	NH1	ARG	A	359	30.592	55.052	36.876	1.00	28.85	A
	ATOM	2750	NH2	ARG	A	359	32.252	54.896	38.464	1.00	29.94	A
	ATOM	2751	C	ARG	A	359	29.768	48.239	33.814	1.00	18.37	A
55	ATOM	2752	O	ARG	A	359	29.294	47.224	34.333	1.00	16.91	A
	ATOM	2753	N	LEU	A	360	29.407	48.675	32.611	1.00	17.62	A
	ATOM	2754	CA	LEU	A	360	28.423	47.960	31.811	1.00	18.02	A
	ATOM	2755	CB	LEU	A	360	28.047	48.782	30.576	1.00	17.79	A
	ATOM	2756	CG	LEU	A	360	27.214	50.040	30.849	1.00	17.79	A

5	ATOM	2757	CD1	LEU	A	360	27.164	50.912	29.602	1.00	17.80	A
	ATOM	2758	CD2	LEU	A	360	25.807	49.639	31.282	1.00	17.86	A
	ATOM	2759	C	LEU	A	360	28.950	46.590	31.392	1.00	18.31	A
	ATOM	2760	O	LEU	A	360	28.222	45.599	31.446	1.00	18.36	A
	ATOM	2761	N	PHE	A	361	30.214	46.536	30.977	1.00	17.86	A
10	ATOM	2762	CA	PHE	A	361	30.831	45.277	30.562	1.00	18.13	A
	ATOM	2763	CB	PHE	A	361	32.253	45.518	30.038	1.00	17.21	A
	ATOM	2764	CG	PHE	A	361	32.313	46.324	28.768	1.00	16.77	A
	ATOM	2765	CD1	PHE	A	361	33.507	46.927	28.376	1.00	17.09	A
	ATOM	2766	CD2	PHE	A	361	31.188	46.481	27.967	1.00	16.11	A
15	ATOM	2767	CE1	PHE	A	361	33.577	47.676	27.204	1.00	15.66	A
	ATOM	2768	CE2	PHE	A	361	31.247	47.229	26.790	1.00	16.59	A
	ATOM	2769	CZ	PHE	A	361	32.442	47.826	26.410	1.00	17.03	A
	ATOM	2770	C	PHE	A	361	30.900	44.265	31.708	1.00	18.81	A
	ATOM	2771	O	PHE	A	361	30.568	43.091	31.528	1.00	17.83	A
20	ATOM	2772	N	GLU	A	362	31.344	44.711	32.881	1.00	19.34	A
	ATOM	2773	CA	GLU	A	362	31.455	43.798	34.016	1.00	20.55	A
	ATOM	2774	CB	GLU	A	362	31.992	44.516	35.258	1.00	22.52	A
	ATOM	2775	CG	GLU	A	362	32.331	43.551	36.397	1.00	25.60	A
	ATOM	2776	CD	GLU	A	362	32.723	44.256	37.683	1.00	27.36	A
25	ATOM	2777	OE1	GLU	A	362	33.457	45.262	37.608	1.00	29.24	A
	ATOM	2778	OE2	GLU	A	362	32.309	43.796	38.770	1.00	29.36	A
	ATOM	2779	C	GLU	A	362	30.105	43.171	34.343	1.00	20.30	A
	ATOM	2780	O	GLU	A	362	30.010	41.963	34.560	1.00	20.30	A
	ATOM	2781	N	HIS	A	363	29.060	43.990	34.373	1.00	20.05	A
30	ATOM	2782	CA	HIS	A	363	27.730	43.485	34.676	1.00	20.56	A
	ATOM	2783	CB	HIS	A	363	26.734	44.636	34.814	1.00	22.06	A
	ATOM	2784	CG	HIS	A	363	25.352	44.191	35.182	1.00	23.46	A
	ATOM	2785	CD2	HIS	A	363	24.204	44.156	34.463	1.00	24.15	A
	ATOM	2786	ND1	HIS	A	363	25.043	43.673	36.421	1.00	24.49	A
35	ATOM	2787	CE1	HIS	A	363	23.765	43.338	36.450	1.00	24.15	A
	ATOM	2788	NE2	HIS	A	363	23.233	43.620	35.274	1.00	24.25	A
	ATOM	2789	C	HIS	A	363	27.233	42.531	33.596	1.00	19.95	A
	ATOM	2790	O	HIS	A	363	26.919	41.371	33.868	1.00	19.76	A
	ATOM	2791	N	ILE	A	364	27.164	43.029	32.368	1.00	19.34	A
40	ATOM	2792	CA	ILE	A	364	26.681	42.237	31.248	1.00	19.40	A
	ATOM	2793	CB	ILE	A	364	26.783	43.031	29.929	1.00	18.87	A
	ATOM	2794	CG2	ILE	A	364	26.359	42.149	28.751	1.00	18.65	A
	ATOM	2795	CG1	ILE	A	364	25.894	44.277	30.007	1.00	19.23	A
	ATOM	2796	CD1	ILE	A	364	26.025	45.203	28.816	1.00	19.57	A
45	ATOM	2797	C	ILE	A	364	27.400	40.902	31.079	1.00	19.15	A
	ATOM	2798	O	ILE	A	364	26.755	39.863	30.931	1.00	19.49	A
	ATOM	2799	N	ASN	A	365	28.728	40.921	31.112	1.00	18.92	A
	ATOM	2800	CA	ASN	A	365	29.491	39.691	30.934	1.00	20.01	A
	ATOM	2801	CB	ASN	A	365	30.970	40.010	30.701	1.00	18.96	A
50	ATOM	2802	CG	ASN	A	365	31.189	40.886	29.481	1.00	18.43	A
	ATOM	2803	OD1	ASN	A	365	30.294	41.044	28.652	1.00	18.38	A
	ATOM	2804	ND2	ASN	A	365	32.385	41.452	29.362	1.00	17.32	A
	ATOM	2805	C	ASN	A	365	29.356	38.697	32.088	1.00	21.35	A
	ATOM	2806	O	ASN	A	365	29.670	37.519	31.928	1.00	21.12	A
55	ATOM	2807	N	SER	A	366	28.880	39.165	33.239	1.00	22.96	A
	ATOM	2808	CA	SER	A	366	28.714	38.291	34.401	1.00	24.46	A
	ATOM	2809	CB	SER	A	366	29.198	38.999	35.674	1.00	24.61	A
	ATOM	2810	OG	SER	A	366	28.384	40.117	35.978	1.00	24.98	A
	ATOM	2811	C	SER	A	366	27.264	37.843	34.577	1.00	25.44	A

5	ATOM	2812	O	SER	A	366	26.956	37.046	35.460	1.00	25.76	A
	ATOM	2813	N	GLN	A	367	26.375	38.364	33.736	1.00	26.52	A
	ATOM	2814	CA	GLN	A	367	24.961	38.003	33.779	1.00	27.62	A
	ATOM	2815	CB	GLN	A	367	24.083	39.251	33.640	1.00	28.64	A
	ATOM	2816	CG	GLN	A	367	24.113	40.174	34.850	1.00	30.61	A
10	ATOM	2817	CD	GLN	A	367	23.525	39.520	36.088	1.00	32.01	A
	ATOM	2818	OE1	GLN	A	367	22.341	39.176	36.119	1.00	32.79	A
	ATOM	2819	NE2	GLN	A	367	24.352	39.340	37.113	1.00	32.51	A
	ATOM	2820	C	GLN	A	367	24.665	37.033	32.636	1.00	27.49	A
	ATOM	2821	O	GLN	A	367	24.335	37.447	31.524	1.00	27.23	A
15	ATOM	2822	N	ALA	A	368	24.778	35.740	32.926	1.00	27.43	A
	ATOM	2823	CA	ALA	A	368	24.551	34.689	31.938	1.00	27.09	A
	ATOM	2824	CB	ALA	A	368	24.531	33.327	32.633	1.00	27.33	A
	ATOM	2825	C	ALA	A	368	23.291	34.851	31.087	1.00	26.68	A
	ATOM	2826	O	ALA	A	368	23.311	34.568	29.889	1.00	26.56	A
20	ATOM	2827	N	HIS	A	369	22.199	35.303	31.697	1.00	26.31	A
	ATOM	2828	CA	HIS	A	369	20.942	35.464	30.970	1.00	25.66	A
	ATOM	2829	CB	HIS	A	369	19.852	35.981	31.916	1.00	27.03	A
	ATOM	2830	CG	HIS	A	369	20.044	37.401	32.346	1.00	27.87	A
	ATOM	2831	CD2	HIS	A	369	20.642	37.928	33.441	1.00	28.21	A
25	ATOM	2832	ND1	HIS	A	369	19.610	38.471	31.594	1.00	28.33	A
	ATOM	2833	CE1	HIS	A	369	19.932	39.597	32.207	1.00	28.26	A
	ATOM	2834	NE2	HIS	A	369	20.559	39.295	33.330	1.00	28.33	A
	ATOM	2835	C	HIS	A	369	21.059	36.375	29.744	1.00	25.04	A
	ATOM	2836	O	HIS	A	369	20.210	36.340	28.853	1.00	24.82	A
30	ATOM	2837	N	PHE	A	370	22.109	37.189	29.697	1.00	24.10	A
	ATOM	2838	CA	PHE	A	370	22.320	38.080	28.559	1.00	22.85	A
	ATOM	2839	CB	PHE	A	370	23.235	39.247	28.944	1.00	23.57	A
	ATOM	2840	CG	PHE	A	370	22.533	40.365	29.669	1.00	23.73	A
	ATOM	2841	CD1	PHE	A	370	23.086	40.915	30.819	1.00	24.30	A
35	ATOM	2842	CD2	PHE	A	370	21.338	40.890	29.184	1.00	24.44	A
	ATOM	2843	CE1	PHE	A	370	22.460	41.973	31.480	1.00	24.01	A
	ATOM	2844	CE2	PHE	A	370	20.704	41.950	29.839	1.00	24.36	A
	ATOM	2845	CZ	PHE	A	370	21.270	42.490	30.989	1.00	23.88	A
	ATOM	2846	C	PHE	A	370	22.964	37.308	27.414	1.00	21.51	A
40	ATOM	2847	O	PHE	A	370	22.698	37.585	26.244	1.00	20.83	A
	ATOM	2848	N	ASN	A	371	23.806	36.339	27.768	1.00	19.82	A
	ATOM	2849	CA	ASN	A	371	24.521	35.528	26.789	1.00	19.02	A
	ATOM	2850	CB	ASN	A	371	23.538	34.661	26.007	1.00	19.65	A
	ATOM	2851	CG	ASN	A	371	22.892	33.599	26.877	1.00	20.03	A
45	ATOM	2852	OD1	ASN	A	371	23.573	32.718	27.405	1.00	20.28	A
	ATOM	2853	ND2	ASN	A	371	21.578	33.682	27.038	1.00	20.15	A
	ATOM	2854	C	ASN	A	371	25.316	36.430	25.850	1.00	18.66	A
	ATOM	2855	O	ASN	A	371	25.340	36.229	24.633	1.00	17.96	A
	ATOM	2856	N	VAL	A	372	25.969	37.424	26.447	1.00	18.22	A
50	ATOM	2857	CA	VAL	A	372	26.777	38.395	25.721	1.00	18.11	A
	ATOM	2858	CB	VAL	A	372	26.094	39.788	25.701	1.00	18.45	A
	ATOM	2859	CG1	VAL	A	372	27.065	40.851	25.163	1.00	17.90	A
	ATOM	2860	CG2	VAL	A	372	24.834	39.739	24.855	1.00	18.52	A
	ATOM	2861	C	VAL	A	372	28.146	38.564	26.372	1.00	18.05	A
55	ATOM	2862	O	VAL	A	372	28.274	38.520	27.594	1.00	17.93	A
	ATOM	2863	N	GLN	A	373	29.162	38.751	25.538	1.00	17.52	A
	ATOM	2864	CA	GLN	A	373	30.528	38.982	25.995	1.00	17.49	A
	ATOM	2865	CB	GLN	A	373	31.442	37.823	25.579	1.00	18.60	A
	ATOM	2866	CG	GLN	A	373	32.923	38.011	25.922	1.00	19.99	A

5	ATOM	2867	CD	GLN	A	373	33.158	38.334	27.394	1.00	20.94	A
	ATOM	2868	OE1	GLN	A	373	32.526	37.756	28.279	1.00	21.70	A
	ATOM	2869	NE2	GLN	A	373	34.082	39.252	27.659	1.00	20.60	A
	ATOM	2870	C	GLN	A	373	30.935	40.270	25.282	1.00	17.32	A
	ATOM	2871	O	GLN	A	373	31.179	40.265	24.079	1.00	17.16	A
10	ATOM	2872	N	ALA	A	374	30.984	41.371	26.023	1.00	16.74	A
	ATOM	2873	CA	ALA	A	374	31.325	42.665	25.445	1.00	16.51	A
	ATOM	2874	CB	ALA	A	374	30.217	43.671	25.756	1.00	15.86	A
	ATOM	2875	C	ALA	A	374	32.662	43.202	25.940	1.00	16.97	A
	ATOM	2876	O	ALA	A	374	33.046	42.984	27.087	1.00	16.37	A
15	ATOM	2877	N	GLN	A	375	33.364	43.920	25.070	1.00	16.76	A
	ATOM	2878	CA	GLN	A	375	34.650	44.498	25.440	1.00	17.48	A
	ATOM	2879	CB	GLN	A	375	35.731	43.415	25.509	1.00	19.85	A
	ATOM	2880	CG	GLN	A	375	35.933	42.644	24.205	1.00	23.52	A
	ATOM	2881	CD	GLN	A	375	35.066	41.404	24.129	1.00	26.57	A
20	ATOM	2882	OE1	GLN	A	375	35.214	40.486	24.939	1.00	27.84	A
	ATOM	2883	NE2	GLN	A	375	34.153	41.370	23.161	1.00	27.24	A
	ATOM	2884	C	GLN	A	375	35.085	45.548	24.431	1.00	16.70	A
	ATOM	2885	O	GLN	A	375	34.534	45.632	23.335	1.00	15.55	A
	ATOM	2886	N	PHE	A	376	36.069	46.356	24.814	1.00	15.17	A
25	ATOM	2887	CA	PHE	A	376	36.602	47.358	23.904	1.00	14.46	A
	ATOM	2888	CB	PHE	A	376	37.543	48.320	24.637	1.00	13.95	A
	ATOM	2889	CG	PHE	A	376	36.848	49.228	25.610	1.00	14.70	A
	ATOM	2890	CD1	PHE	A	376	37.246	49.273	26.940	1.00	14.81	A
	ATOM	2891	CD2	PHE	A	376	35.798	50.044	25.195	1.00	14.57	A
30	ATOM	2892	CE1	PHE	A	376	36.610	50.117	27.848	1.00	15.62	A
	ATOM	2893	CE2	PHE	A	376	35.157	50.894	26.098	1.00	15.64	A
	ATOM	2894	CZ	PHE	A	376	35.567	50.928	27.428	1.00	14.70	A
	ATOM	2895	C	PHE	A	376	37.396	46.567	22.877	1.00	13.69	A
	ATOM	2896	O	PHE	A	376	38.028	45.566	23.214	1.00	13.20	A
35	ATOM	2897	N	GLY	A	377	37.360	47.005	21.625	1.00	13.56	A
	ATOM	2898	CA	GLY	A	377	38.106	46.305	20.598	1.00	13.03	A
	ATOM	2899	C	GLY	A	377	38.537	47.240	19.490	1.00	13.47	A
	ATOM	2900	O	GLY	A	377	38.226	48.432	19.519	1.00	12.17	A
	ATOM	2901	N	THR	A	378	39.270	46.704	18.522	1.00	13.13	A
40	ATOM	2902	CA	THR	A	378	39.712	47.492	17.384	1.00	14.10	A
	ATOM	2903	CB	THR	A	378	41.226	47.348	17.129	1.00	14.13	A
	ATOM	2904	OG1	THR	A	378	41.521	46.003	16.739	1.00	15.02	A
	ATOM	2905	CG2	THR	A	378	42.012	47.697	18.385	1.00	15.10	A
	ATOM	2906	C	THR	A	378	38.961	46.973	16.167	1.00	13.64	A
45	ATOM	2907	O	THR	A	378	38.278	45.945	16.238	1.00	13.55	A
	ATOM	2908	N	LEU	A	379	39.084	47.684	15.054	1.00	12.92	A
	ATOM	2909	CA	LEU	A	379	38.409	47.289	13.827	1.00	12.73	A
	ATOM	2910	CB	LEU	A	379	38.649	48.342	12.742	1.00	12.44	A
	ATOM	2911	CG	LEU	A	379	37.870	48.131	11.445	1.00	12.37	A
50	ATOM	2912	CD1	LEU	A	379	36.372	48.184	11.741	1.00	11.04	A
	ATOM	2913	CD2	LEU	A	379	38.270	49.205	10.433	1.00	11.81	A
	ATOM	2914	C	LEU	A	379	38.896	45.924	13.338	1.00	13.00	A
	ATOM	2915	O	LEU	A	379	38.098	45.074	12.934	1.00	12.40	A
	ATOM	2916	N	GLN	A	380	40.208	45.714	13.384	1.00	13.46	A
55	ATOM	2917	CA	GLN	A	380	40.782	44.450	12.936	1.00	14.77	A
	ATOM	2918	CB	GLN	A	380	42.309	44.516	12.986	1.00	15.81	A
	ATOM	2919	CG	GLN	A	380	42.995	43.306	12.376	1.00	19.57	A
	ATOM	2920	CD	GLN	A	380	42.592	43.086	10.930	1.00	21.70	A
	ATOM	2921	OE1	GLN	A	380	42.669	44.001	10.106	1.00	22.56	A

	ATOM	2922	NE2	GLN	A	380	42.162	41.866	10.612	1.00	22.92	A
	ATOM	2923	C	GLN	A	380	40.285	43.285	13.791	1.00	14.48	A
	ATOM	2924	O	GLN	A	380	40.054	42.187	13.280	1.00	13.99	A
5	ATOM	2925	N	GLU	A	381	40.127	43.522	15.090	1.00	14.50	A
	ATOM	2926	CA	GLU	A	381	39.653	42.474	15.985	1.00	15.49	A
	ATOM	2927	CB	GLU	A	381	39.648	42.962	17.439	1.00	17.08	A
	ATOM	2928	CG	GLU	A	381	41.038	43.325	17.957	1.00	21.28	A
	ATOM	2929	CD	GLU	A	381	41.063	43.610	19.448	1.00	22.82	A
10	ATOM	2930	OE1	GLU	A	381	40.241	44.415	19.921	1.00	22.89	A
	ATOM	2931	OE2	GLU	A	381	41.921	43.032	20.148	1.00	27.14	A
	ATOM	2932	C	GLU	A	381	38.252	42.041	15.573	1.00	14.29	A
	ATOM	2933	O	GLU	A	381	37.937	40.853	15.571	1.00	13.97	A
	ATOM	2934	N	TYR	A	382	37.413	43.011	15.227	1.00	13.36	A
15	ATOM	2935	CA	TYR	A	382	36.058	42.709	14.796	1.00	13.03	A
	ATOM	2936	CB	TYR	A	382	35.294	43.993	14.468	1.00	13.08	A
	ATOM	2937	CG	TYR	A	382	33.985	43.722	13.763	1.00	13.27	A
	ATOM	2938	CD1	TYR	A	382	32.928	43.096	14.430	1.00	13.48	A
	ATOM	2939	CE1	TYR	A	382	31.746	42.766	13.764	1.00	11.84	A
20	ATOM	2940	CD2	TYR	A	382	33.826	44.020	12.407	1.00	12.53	A
	ATOM	2941	CE2	TYR	A	382	32.650	43.693	11.732	1.00	12.76	A
	ATOM	2942	CZ	TYR	A	382	31.615	43.062	12.419	1.00	12.40	A
	ATOM	2943	OH	TYR	A	382	30.461	42.708	11.749	1.00	12.59	A
	ATOM	2944	C	TYR	A	382	36.078	41.820	13.554	1.00	13.04	A
25	ATOM	2945	O	TYR	A	382	35.451	40.761	13.522	1.00	12.38	A
	ATOM	2946	N	PHE	A	383	36.791	42.261	12.523	1.00	12.27	A
	ATOM	2947	CA	PHE	A	383	36.864	41.496	11.285	1.00	13.24	A
	ATOM	2948	CB	PHE	A	383	37.653	42.281	10.227	1.00	13.43	A
	ATOM	2949	CG	PHE	A	383	36.876	43.417	9.605	1.00	12.96	A
30	ATOM	2950	CD1	PHE	A	383	37.365	44.717	9.648	1.00	13.91	A
	ATOM	2951	CD2	PHE	A	383	35.659	43.181	8.968	1.00	14.11	A
	ATOM	2952	CE1	PHE	A	383	36.658	45.772	9.064	1.00	13.79	A
	ATOM	2953	CE2	PHE	A	383	34.939	44.224	8.379	1.00	14.72	A
	ATOM	2954	CZ	PHE	A	383	35.441	45.525	8.426	1.00	14.80	A
35	ATOM	2955	C	PHE	A	383	37.460	40.095	11.474	1.00	14.00	A
	ATOM	2956	O	PHE	A	383	36.984	39.129	10.873	1.00	13.60	A
	ATOM	2957	N	ASP	A	384	38.494	39.976	12.303	1.00	14.72	A
	ATOM	2958	CA	ASP	A	384	39.098	38.662	12.540	1.00	15.43	A
	ATOM	2959	CB	ASP	A	384	40.272	38.759	13.517	1.00	16.51	A
40	ATOM	2960	CG	ASP	A	384	41.505	39.384	12.898	1.00	17.75	A
	ATOM	2961	OD1	ASP	A	384	41.584	39.464	11.652	1.00	18.23	A
	ATOM	2962	OD2	ASP	A	384	42.405	39.782	13.666	1.00	19.50	A
	ATOM	2963	C	ASP	A	384	38.054	37.710	13.116	1.00	15.26	A
	ATOM	2964	O	ASP	A	384	37.960	36.553	12.704	1.00	15.46	A
45	ATOM	2965	N	ALA	A	385	37.265	38.206	14.064	1.00	14.92	A
	ATOM	2966	CA	ALA	A	385	36.226	37.398	14.696	1.00	15.13	A
	ATOM	2967	CB	ALA	A	385	35.606	38.161	15.866	1.00	14.89	A
	ATOM	2968	C	ALA	A	385	35.149	37.013	13.688	1.00	15.31	A
	ATOM	2969	O	ALA	A	385	34.693	35.868	13.657	1.00	15.33	A
50	ATOM	2970	N	VAL	A	386	34.737	37.969	12.863	1.00	15.18	A
	ATOM	2971	CA	VAL	A	386	33.722	37.698	11.851	1.00	15.40	A
	ATOM	2972	CB	VAL	A	386	33.453	38.941	10.980	1.00	15.05	A
	ATOM	2973	CG1	VAL	A	386	32.561	38.567	9.793	1.00	15.44	A
	ATOM	2974	CG2	VAL	A	386	32.788	40.022	11.819	1.00	15.00	A
	ATOM	2975	C	VAL	A	386	34.153	36.548	10.938	1.00	16.11	A
55	ATOM	2976	O	VAL	A	386	33.387	35.610	10.690	1.00	16.01	A

5	ATOM	2977	N	HIS	A	387	35.382	36.613	10.443	1.00	16.13	A
	ATOM	2978	CA	HIS	A	387	35.869	35.570	9.557	1.00	16.83	A
	ATOM	2979	CB	HIS	A	387	37.129	36.053	8.840	1.00	16.93	A
	ATOM	2980	CG	HIS	A	387	36.860	37.172	7.881	1.00	17.54	A
	ATOM	2981	CD2	HIS	A	387	37.271	38.462	7.874	1.00	17.35	A
10	ATOM	2982	ND1	HIS	A	387	36.022	37.030	6.796	1.00	17.71	A
	ATOM	2983	CE1	HIS	A	387	35.926	38.186	6.163	1.00	17.77	A
	ATOM	2984	NE2	HIS	A	387	36.674	39.072	6.798	1.00	17.27	A
	ATOM	2985	C	HIS	A	387	36.090	34.243	10.274	1.00	17.78	A
	ATOM	2986	O	HIS	A	387	36.055	33.181	9.651	1.00	16.94	A
15	ATOM	2987	N	GLN	A	388	36.307	34.300	11.583	1.00	19.02	A
	ATOM	2988	CA	GLN	A	388	36.474	33.077	12.358	1.00	21.11	A
	ATOM	2989	CB	GLN	A	388	36.943	33.402	13.780	1.00	23.11	A
	ATOM	2990	CG	GLN	A	388	38.439	33.692	13.900	1.00	25.90	A
	ATOM	2991	CD	GLN	A	388	38.804	34.341	15.230	1.00	28.63	A
20	ATOM	2992	OE1	GLN	A	388	38.246	34.000	16.275	1.00	30.49	A
	ATOM	2993	NE2	GLN	A	388	39.754	35.274	15.197	1.00	29.72	A
	ATOM	2994	C	GLN	A	388	35.105	32.394	12.392	1.00	21.50	A
	ATOM	2995	O	GLN	A	388	35.005	31.169	12.304	1.00	21.80	A
	ATOM	2996	N	ALA	A	389	34.050	33.196	12.506	1.00	21.77	A
25	ATOM	2997	CA	ALA	A	389	32.686	32.674	12.535	1.00	22.68	A
	ATOM	2998	CB	ALA	A	389	31.707	33.781	12.912	1.00	22.05	A
	ATOM	2999	C	ALA	A	389	32.341	32.109	11.161	1.00	23.68	A
	ATOM	3000	O	ALA	A	389	31.684	31.069	11.045	1.00	23.65	A
	ATOM	3001	N	GLU	A	390	32.791	32.808	10.124	1.00	24.67	A
30	ATOM	3002	CA	GLU	A	390	32.564	32.406	8.741	1.00	26.15	A
	ATOM	3003	CB	GLU	A	390	33.169	33.453	7.796	1.00	26.00	A
	ATOM	3004	CG	GLU	A	390	33.252	33.042	6.328	1.00	26.38	A
	ATOM	3005	CD	GLU	A	390	33.855	34.137	5.456	1.00	26.52	A
	ATOM	3006	OE1	GLU	A	390	34.755	34.851	5.944	1.00	25.91	A
35	ATOM	3007	OE2	GLU	A	390	33.441	34.276	4.285	1.00	26.51	A
	ATOM	3008	C	GLU	A	390	33.195	31.042	8.483	1.00	27.33	A
	ATOM	3009	O	GLU	A	390	32.571	30.157	7.895	1.00	27.52	A
	ATOM	3010	N	ARG	A	391	34.438	30.880	8.926	1.00	28.78	A
	ATOM	3011	CA	ARG	A	391	35.157	29.626	8.751	1.00	30.39	A
40	ATOM	3012	CB	ARG	A	391	36.623	29.794	9.160	1.00	31.73	A
	ATOM	3013	CG	ARG	A	391	37.466	30.566	8.153	1.00	33.97	A
	ATOM	3014	CD	ARG	A	391	38.899	30.722	8.640	1.00	35.57	A
	ATOM	3015	NE	ARG	A	391	38.987	31.640	9.770	1.00	38.15	A
	ATOM	3016	CZ	ARG	A	391	40.082	31.831	10.499	1.00	39.05	A
45	ATOM	3017	NH1	ARG	A	391	41.195	31.163	10.221	1.00	40.21	A
	ATOM	3018	NH2	ARG	A	391	40.065	32.693	11.506	1.00	39.40	A
	ATOM	3019	C	ARG	A	391	34.516	28.505	9.564	1.00	30.59	A
	ATOM	3020	O	ARG	A	391	34.605	27.333	9.198	1.00	31.38	A
	ATOM	3021	N	ALA	A	392	33.874	28.867	10.669	1.00	30.51	A
50	ATOM	3022	CA	ALA	A	392	33.212	27.882	11.516	1.00	30.61	A
	ATOM	3023	CB	ALA	A	392	32.878	28.494	12.873	1.00	30.84	A
	ATOM	3024	C	ALA	A	392	31.939	27.415	10.819	1.00	30.66	A
	ATOM	3025	O	ALA	A	392	31.261	26.495	11.283	1.00	30.52	A
	ATOM	3026	N	GLY	A	393	31.621	28.065	9.703	1.00	30.35	A
55	ATOM	3027	CA	GLY	A	393	30.442	27.708	8.939	1.00	30.05	A
	ATOM	3028	C	GLY	A	393	29.130	28.249	9.475	1.00	29.86	A
	ATOM	3029	O	GLY	A	393	28.073	27.679	9.208	1.00	29.53	A
	ATOM	3030	N	GLN	A	394	29.175	29.346	10.223	1.00	29.75	A
	ATOM	3031	CA	GLN	A	394	27.939	29.902	10.755	1.00	29.86	A

5	ATOM	3032	CB	GLN	A	394	28.138	30.415	12.188	1.00	30.87	A
	ATOM	3033	CG	GLN	A	394	28.875	31.732	12.311	1.00	31.79	A
	ATOM	3034	CD	GLN	A	394	28.756	32.326	13.706	1.00	32.39	A
	ATOM	3035	OE1	GLN	A	394	29.228	31.747	14.687	1.00	32.51	A
	ATOM	3036	NE2	GLN	A	394	28.113	33.485	13.800	1.00	31.11	A
10	ATOM	3037	C	GLN	A	394	27.375	31.015	9.878	1.00	29.23	A
	ATOM	3038	O	GLN	A	394	26.319	31.567	10.178	1.00	29.43	A
	ATOM	3039	N	ALA	A	395	28.067	31.336	8.789	1.00	28.59	A
	ATOM	3040	CA	ALA	A	395	27.596	32.385	7.892	1.00	27.95	A
	ATOM	3041	CB	ALA	A	395	27.824	33.753	8.533	1.00	28.94	A
15	ATOM	3042	C	ALA	A	395	28.244	32.349	6.511	1.00	27.67	A
	ATOM	3043	O	ALA	A	395	29.419	32.013	6.367	1.00	27.22	A
	ATOM	3044	N	GLU	A	396	27.454	32.694	5.500	1.00	27.14	A
	ATOM	3045	CA	GLU	A	396	27.917	32.745	4.118	1.00	27.12	A
	ATOM	3046	CB	GLU	A	396	27.131	31.760	3.245	1.00	29.69	A
20	ATOM	3047	CG	GLU	A	396	26.527	30.582	4.002	1.00	34.14	A
	ATOM	3048	CD	GLU	A	396	25.165	30.906	4.604	1.00	36.53	A
	ATOM	3049	OE1	GLU	A	396	25.068	31.857	5.413	1.00	38.43	A
	ATOM	3050	OE2	GLU	A	396	24.187	30.204	4.263	1.00	38.46	A
	ATOM	3051	C	GLU	A	396	27.613	34.173	3.685	1.00	25.18	A
25	ATOM	3052	O	GLU	A	396	26.524	34.680	3.958	1.00	25.88	A
	ATOM	3053	N	PHE	A	397	28.557	34.830	3.023	1.00	22.14	A
	ATOM	3054	CA	PHE	A	397	28.328	36.211	2.619	1.00	19.29	A
	ATOM	3055	CB	PHE	A	397	29.530	37.079	2.998	1.00	18.47	A
	ATOM	3056	CG	PHE	A	397	29.776	37.147	4.476	1.00	17.12	A
30	ATOM	3057	CD1	PHE	A	397	30.814	36.426	5.056	1.00	17.39	A
	ATOM	3058	CD2	PHE	A	397	28.948	37.909	5.293	1.00	16.43	A
	ATOM	3059	CE1	PHE	A	397	31.025	36.462	6.438	1.00	15.91	A
	ATOM	3060	CE2	PHE	A	397	29.148	37.953	6.673	1.00	16.34	A
	ATOM	3061	CZ	PHE	A	397	30.190	37.227	7.245	1.00	15.91	A
35	ATOM	3062	C	PHE	A	397	27.999	36.403	1.148	1.00	18.17	A
	ATOM	3063	O	PHE	A	397	28.569	35.749	0.278	1.00	17.72	A
	ATOM	3064	N	PRO	A	398	27.072	37.327	0.857	1.00	16.93	A
	ATOM	3065	CD	PRO	A	398	26.367	38.194	1.819	1.00	17.16	A
	ATOM	3066	CA	PRO	A	398	26.653	37.622	-0.512	1.00	16.50	A
40	ATOM	3067	CB	PRO	A	398	25.390	38.446	-0.301	1.00	16.82	A
	ATOM	3068	CG	PRO	A	398	25.741	39.246	0.916	1.00	16.85	A
	ATOM	3069	C	PRO	A	398	27.726	38.392	-1.282	1.00	15.76	A
	ATOM	3070	O	PRO	A	398	28.589	39.044	-0.684	1.00	15.25	A
	ATOM	3071	N	THR	A	399	27.670	38.296	-2.607	1.00	14.50	A
45	ATOM	3072	CA	THR	A	399	28.603	38.994	-3.481	1.00	13.87	A
	ATOM	3073	CB	THR	A	399	29.006	38.126	-4.684	1.00	13.66	A
	ATOM	3074	OG1	THR	A	399	27.828	37.691	-5.378	1.00	12.89	A
	ATOM	3075	CG2	THR	A	399	29.803	36.920	-4.221	1.00	14.64	A
	ATOM	3076	C	THR	A	399	27.881	40.238	-3.986	1.00	13.35	A
50	ATOM	3077	O	THR	A	399	26.653	40.254	-4.082	1.00	13.12	A
	ATOM	3078	N	LEU	A	400	28.636	41.280	-4.311	1.00	12.55	A
	ATOM	3079	CA	LEU	A	400	28.019	42.517	-4.776	1.00	11.68	A
	ATOM	3080	CB	LEU	A	400	27.612	43.364	-3.559	1.00	11.72	A
	ATOM	3081	CG	LEU	A	400	26.954	44.740	-3.743	1.00	11.84	A
55	ATOM	3082	CD1	LEU	A	400	26.178	45.085	-2.489	1.00	11.84	A
	ATOM	3083	CD2	LEU	A	400	28.002	45.812	-4.032	1.00	11.75	A
	ATOM	3084	C	LEU	A	400	28.941	43.317	-5.678	1.00	11.82	A
	ATOM	3085	O	LEU	A	400	30.160	43.294	-5.508	1.00	10.86	A
	ATOM	3086	N	SER	A	401	28.354	43.998	-6.660	1.00	11.77	A

5	ATOM	3087	CA	SER	A	401	29.117	44.857	-7.562	1.00	11.13	A
	ATOM	3088	CB	SER	A	401	29.352	44.188	-8.924	1.00	11.81	A
	ATOM	3089	OG	SER	A	401	28.186	44.215	-9.725	1.00	11.97	A
	ATOM	3090	C	SER	A	401	28.283	46.123	-7.739	1.00	11.29	A
	ATOM	3091	O	SER	A	401	27.062	46.092	-7.564	1.00	11.28	A
10	ATOM	3092	N	GLY	A	402	28.942	47.230	-8.072	1.00	10.51	A
	ATOM	3093	CA	GLY	A	402	28.245	48.492	-8.256	1.00	11.12	A
	ATOM	3094	C	GLY	A	402	28.827	49.576	-7.362	1.00	11.67	A
	ATOM	3095	O	GLY	A	402	29.852	49.361	-6.715	1.00	12.01	A
	ATOM	3096	N	ASP	A	403	28.183	50.739	-7.322	1.00	11.30	A
15	ATOM	3097	CA	ASP	A	403	28.665	51.834	-6.489	1.00	11.42	A
	ATOM	3098	CB	ASP	A	403	29.180	52.983	-7.367	1.00	11.48	A
	ATOM	3099	CG	ASP	A	403	28.063	53.737	-8.067	1.00	12.11	A
	ATOM	3100	OD1	ASP	A	403	26.967	53.168	-8.236	1.00	13.59	A
	ATOM	3101	OD2	ASP	A	403	28.287	54.900	-8.461	1.00	12.95	A
20	ATOM	3102	C	ASP	A	403	27.556	52.333	-5.569	1.00	11.75	A
	ATOM	3103	O	ASP	A	403	26.444	51.797	-5.570	1.00	11.42	A
	ATOM	3104	N	PHE	A	404	27.864	53.355	-4.780	1.00	11.12	A
	ATOM	3105	CA	PHE	A	404	26.887	53.913	-3.865	1.00	11.24	A
	ATOM	3106	CB	PHE	A	404	27.233	53.526	-2.424	1.00	11.12	A
25	ATOM	3107	CG	PHE	A	404	27.204	52.036	-2.184	1.00	11.08	A
	ATOM	3108	CD1	PHE	A	404	28.377	51.288	-2.207	1.00	10.94	A
	ATOM	3109	CD2	PHE	A	404	25.993	51.378	-1.980	1.00	10.57	A
	ATOM	3110	CE1	PHE	A	404	28.347	49.899	-2.030	1.00	11.95	A
	ATOM	3111	CE2	PHE	A	404	25.949	49.992	-1.802	1.00	10.67	A
30	ATOM	3112	CZ	PHE	A	404	27.126	49.250	-1.826	1.00	11.36	A
	ATOM	3113	C	PHE	A	404	26.737	55.422	-4.003	1.00	11.30	A
	ATOM	3114	O	PHE	A	404	26.912	56.178	-3.046	1.00	10.08	A
	ATOM	3115	N	PHE	A	405	26.420	55.835	-5.228	1.00	11.82	A
	ATOM	3116	CA	PHE	A	405	26.172	57.230	-5.575	1.00	12.35	A
35	ATOM	3117	CB	PHE	A	405	27.235	57.750	-6.550	1.00	12.94	A
	ATOM	3118	CG	PHE	A	405	28.614	57.857	-5.958	1.00	13.35	A
	ATOM	3119	CD1	PHE	A	405	29.699	57.250	-6.585	1.00	13.75	A
	ATOM	3120	CD2	PHE	A	405	28.837	58.584	-4.789	1.00	13.48	A
	ATOM	3121	CE1	PHE	A	405	30.987	57.366	-6.057	1.00	12.89	A
40	ATOM	3122	CE2	PHE	A	405	30.126	58.706	-4.255	1.00	12.99	A
	ATOM	3123	CZ	PHE	A	405	31.198	58.095	-4.891	1.00	12.93	A
	ATOM	3124	C	PHE	A	405	24.817	57.170	-6.290	1.00	12.41	A
	ATOM	3125	O	PHE	A	405	24.539	56.187	-6.972	1.00	12.49	A
	ATOM	3126	N	THR	A	406	23.973	58.192	-6.153	1.00	12.18	A
45	ATOM	3127	CA	THR	A	406	24.254	59.382	-5.364	1.00	12.39	A
	ATOM	3128	CB	THR	A	406	23.747	60.646	-6.108	1.00	12.21	A
	ATOM	3129	OG1	THR	A	406	24.631	60.929	-7.201	1.00	13.40	A
	ATOM	3130	CG2	THR	A	406	23.683	61.848	-5.177	1.00	12.11	A
	ATOM	3131	C	THR	A	406	23.611	59.280	-3.983	1.00	12.64	A
50	ATOM	3132	O	THR	A	406	22.440	58.915	-3.838	1.00	12.69	A
	ATOM	3133	N	TYR	A	407	24.404	59.604	-2.971	1.00	12.81	A
	ATOM	3134	CA	TYR	A	407	23.985	59.559	-1.578	1.00	12.99	A
	ATOM	3135	CB	TYR	A	407	25.207	59.809	-0.697	1.00	12.23	A
	ATOM	3136	CG	TYR	A	407	24.941	59.972	0.786	1.00	13.17	A
55	ATOM	3137	CD1	TYR	A	407	24.456	58.914	1.555	1.00	12.48	A
	ATOM	3138	CE1	TYR	A	407	24.326	59.033	2.942	1.00	12.87	A
	ATOM	3139	CD2	TYR	A	407	25.277	61.160	1.436	1.00	12.63	A
	ATOM	3140	CE2	TYR	A	407	25.154	61.290	2.812	1.00	12.47	A
	ATOM	3141	CZ	TYR	A	407	24.686	60.226	3.562	1.00	12.24	A

5	ATOM	3142	OH	TYR	A	407	24.637	60.347	4.933	1.00	11.95	A
	ATOM	3143	C	TYR	A	407	22.890	60.554	-1.211	1.00	13.79	A
	ATOM	3144	O	TYR	A	407	22.830	61.664	-1.742	1.00	13.92	A
	ATOM	3145	N	ALA	A	408	22.026	60.129	-0.294	1.00	14.16	A
	ATOM	3146	CA	ALA	A	408	20.942	60.948	0.234	1.00	14.28	A
10	ATOM	3147	CB	ALA	A	408	19.632	60.667	-0.505	1.00	14.27	A
	ATOM	3148	C	ALA	A	408	20.839	60.506	1.685	1.00	14.52	A
	ATOM	3149	O	ALA	A	408	20.688	59.313	1.956	1.00	14.73	A
	ATOM	3150	N	ASP	A	409	20.955	61.444	2.622	1.00	14.31	A
	ATOM	3151	CA	ASP	A	409	20.881	61.082	4.031	1.00	14.91	A
15	ATOM	3152	CB	ASP	A	409	21.835	61.956	4.870	1.00	14.46	A
	ATOM	3153	CG	ASP	A	409	21.512	63.441	4.803	1.00	14.85	A
	ATOM	3154	OD1	ASP	A	409	20.939	63.893	3.791	1.00	13.80	A
	ATOM	3155	OD2	ASP	A	409	21.860	64.164	5.768	1.00	14.51	A
	ATOM	3156	C	ASP	A	409	19.455	61.135	4.573	1.00	15.58	A
20	ATOM	3157	O	ASP	A	409	19.159	60.546	5.610	1.00	15.51	A
	ATOM	3158	N	ARG	A	410	18.573	61.825	3.853	1.00	16.53	A
	ATOM	3159	CA	ARG	A	410	17.167	61.927	4.240	1.00	17.84	A
	ATOM	3160	CB	ARG	A	410	17.008	62.732	5.535	1.00	19.59	A
	ATOM	3161	CG	ARG	A	410	17.450	64.188	5.475	1.00	22.30	A
25	ATOM	3162	CD	ARG	A	410	17.305	64.806	6.861	1.00	25.55	A
	ATOM	3163	NE	ARG	A	410	17.958	66.105	7.004	1.00	28.63	A
	ATOM	3164	CZ	ARG	A	410	17.454	67.258	6.577	1.00	30.10	A
	ATOM	3165	NH1	ARG	A	410	16.273	67.292	5.967	1.00	31.30	A
	ATOM	3166	NH2	ARG	A	410	18.131	68.383	6.772	1.00	29.89	A
30	ATOM	3167	C	ARG	A	410	16.320	62.559	3.139	1.00	17.93	A
	ATOM	3168	O	ARG	A	410	16.824	63.314	2.305	1.00	17.10	A
	ATOM	3169	N	SER	A	411	15.031	62.230	3.150	1.00	17.62	A
	ATOM	3170	CA	SER	A	411	14.061	62.737	2.182	1.00	18.15	A
	ATOM	3171	CB	SER	A	411	13.513	64.094	2.647	1.00	19.65	A
35	ATOM	3172	OG	SER	A	411	14.555	65.020	2.893	1.00	22.94	A
	ATOM	3173	C	SER	A	411	14.586	62.846	0.754	1.00	16.96	A
	ATOM	3174	O	SER	A	411	15.010	61.850	0.162	1.00	16.97	A
	ATOM	3175	N	ASP	A	412	14.538	64.053	0.198	1.00	15.76	A
	ATOM	3176	CA	ASP	A	412	15.002	64.289	-1.165	1.00	15.28	A
40	ATOM	3177	CB	ASP	A	412	13.967	65.119	-1.939	1.00	15.42	A
	ATOM	3178	CG	ASP	A	412	13.836	66.545	-1.408	1.00	16.05	A
	ATOM	3179	OD1	ASP	A	412	14.311	66.820	-0.284	1.00	15.81	A
	ATOM	3180	OD2	ASP	A	412	13.243	67.390	-2.117	1.00	15.35	A
	ATOM	3181	C	ASP	A	412	16.346	65.014	-1.174	1.00	14.37	A
45	ATOM	3182	O	ASP	A	412	16.756	65.550	-2.200	1.00	14.24	A
	ATOM	3183	N	ASN	A	413	17.022	65.026	-0.029	1.00	14.32	A
	ATOM	3184	CA	ASN	A	413	18.315	65.697	0.091	1.00	13.86	A
	ATOM	3185	CB	ASN	A	413	18.632	66.010	1.557	1.00	14.09	A
	ATOM	3186	CG	ASN	A	413	17.723	67.078	2.155	1.00	14.34	A
50	ATOM	3187	OD1	ASN	A	413	17.958	67.540	3.270	1.00	15.45	A
	ATOM	3188	ND2	ASN	A	413	16.685	67.465	1.425	1.00	13.77	A
	ATOM	3189	C	ASN	A	413	19.453	64.857	-0.488	1.00	14.05	A
	ATOM	3190	O	ASN	A	413	20.151	64.161	0.252	1.00	13.05	A
	ATOM	3191	N	TYR	A	414	19.631	64.926	-1.806	1.00	13.36	A
55	ATOM	3192	CA	TYR	A	414	20.696	64.186	-2.478	1.00	13.34	A
	ATOM	3193	CB	TYR	A	414	20.265	63.760	-3.886	1.00	13.11	A
	ATOM	3194	CG	TYR	A	414	19.261	62.627	-3.894	1.00	12.95	A
	ATOM	3195	CD1	TYR	A	414	17.910	62.856	-3.619	1.00	13.47	A
	ATOM	3196	CE1	TYR	A	414	16.990	61.802	-3.601	1.00	13.24	A

5	ATOM	3197	CD2	TYR	A	414	19.669	61.316	-4.149	1.00	12.99	A
	ATOM	3198	CE2	TYR	A	414	18.761	60.260	-4.129	1.00	12.68	A
	ATOM	3199	CZ	TYR	A	414	17.425	60.508	-3.857	1.00	13.38	A
	ATOM	3200	OH	TYR	A	414	16.531	59.457	-3.848	1.00	12.59	A
	ATOM	3201	C	TYR	A	414	21.940	65.067	-2.554	1.00	12.83	A
10	ATOM	3202	O	TYR	A	414	21.867	66.235	-2.941	1.00	12.53	A
	ATOM	3203	N	TRP	A	415	23.078	64.490	-2.188	1.00	12.46	A
	ATOM	3204	CA	TRP	A	415	24.343	65.213	-2.152	1.00	12.74	A
	ATOM	3205	CB	TRP	A	415	25.250	64.590	-1.088	1.00	12.36	A
	ATOM	3206	CG	TRP	A	415	24.676	64.612	0.297	1.00	12.97	A
15	ATOM	3207	CD2	TRP	A	415	25.388	64.862	1.512	1.00	13.40	A
	ATOM	3208	CE2	TRP	A	415	24.461	64.742	2.573	1.00	13.64	A
	ATOM	3209	CE3	TRP	A	415	26.723	65.175	1.810	1.00	13.48	A
	ATOM	3210	CD1	TRP	A	415	23.379	64.356	0.658	1.00	12.64	A
	ATOM	3211	NE1	TRP	A	415	23.242	64.434	2.024	1.00	13.04	A
20	ATOM	3212	CZ2	TRP	A	415	24.827	64.923	3.911	1.00	13.72	A
	ATOM	3213	CZ3	TRP	A	415	27.086	65.354	3.135	1.00	13.13	A
	ATOM	3214	CH2	TRP	A	415	26.139	65.227	4.174	1.00	13.76	A
	ATOM	3215	C	TRP	A	415	25.086	65.255	-3.482	1.00	12.39	A
	ATOM	3216	O	TRP	A	415	26.224	64.805	-3.566	1.00	12.69	A
25	ATOM	3217	N	SER	A	416	24.453	65.795	-4.516	1.00	11.73	A
	ATOM	3218	CA	SER	A	416	25.102	65.878	-5.815	1.00	11.54	A
	ATOM	3219	CB	SER	A	416	24.117	65.508	-6.932	1.00	11.23	A
	ATOM	3220	OG	SER	A	416	22.849	66.106	-6.727	1.00	10.80	A
	ATOM	3221	C	SER	A	416	25.678	67.271	-6.046	1.00	11.26	A
30	ATOM	3222	O	SER	A	416	26.311	67.526	-7.063	1.00	11.02	A
	ATOM	3223	N	GLY	A	417	25.468	68.165	-5.085	1.00	12.11	A
	ATOM	3224	CA	GLY	A	417	25.983	69.518	-5.214	1.00	12.23	A
	ATOM	3225	C	GLY	A	417	27.500	69.582	-5.147	1.00	12.12	A
	ATOM	3226	O	GLY	A	417	28.130	70.296	-5.930	1.00	12.13	A
35	ATOM	3227	N	TYR	A	418	28.090	68.818	-4.230	1.00	11.66	A
	ATOM	3228	CA	TYR	A	418	29.541	68.813	-4.051	1.00	11.15	A
	ATOM	3229	CB	TYR	A	418	29.904	68.106	-2.738	1.00	10.71	A
	ATOM	3230	CG	TYR	A	418	30.049	66.597	-2.808	1.00	11.18	A
	ATOM	3231	CD1	TYR	A	418	31.302	66.008	-2.993	1.00	10.96	A
40	ATOM	3232	CE1	TYR	A	418	31.456	64.616	-2.990	1.00	10.46	A
	ATOM	3233	CD2	TYR	A	418	28.947	65.758	-2.632	1.00	11.76	A
	ATOM	3234	CE2	TYR	A	418	29.090	64.360	-2.628	1.00	11.02	A
	ATOM	3235	CZ	TYR	A	418	30.348	63.803	-2.805	1.00	10.28	A
	ATOM	3236	OH	TYR	A	418	30.511	62.435	-2.778	1.00	11.20	A
45	ATOM	3237	C	TYR	A	418	30.313	68.207	-5.231	1.00	10.98	A
	ATOM	3238	O	TYR	A	418	31.545	68.208	-5.250	1.00	10.37	A
	ATOM	3239	N	TYR	A	419	29.591	67.683	-6.213	1.00	10.63	A
	ATOM	3240	CA	TYR	A	419	30.245	67.144	-7.399	1.00	10.39	A
	ATOM	3241	CB	TYR	A	419	29.247	66.380	-8.280	1.00	10.83	A
50	ATOM	3242	CG	TYR	A	419	28.624	65.146	-7.656	1.00	10.85	A
	ATOM	3243	CD1	TYR	A	419	27.464	64.590	-8.198	1.00	11.08	A
	ATOM	3244	CE1	TYR	A	419	26.897	63.438	-7.660	1.00	11.16	A
	ATOM	3245	CD2	TYR	A	419	29.201	64.518	-6.555	1.00	10.49	A
	ATOM	3246	CE2	TYR	A	419	28.640	63.359	-6.008	1.00	10.86	A
55	ATOM	3247	CZ	TYR	A	419	27.489	62.827	-6.568	1.00	11.11	A
	ATOM	3248	OH	TYR	A	419	26.935	61.675	-6.051	1.00	10.77	A
	ATOM	3249	C	TYR	A	419	30.766	68.351	-8.191	1.00	10.55	A
	ATOM	3250	O	TYR	A	419	31.607	68.203	-9.083	1.00	11.05	A
	ATOM	3251	N	THR	A	420	30.279	69.544	-7.843	1.00	10.27	A

5	ATOM	3252	CA	THR	A	420	30.663	70.770	-8.548	1.00	9.65	A
	ATOM	3253	CB	THR	A	420	29.458	71.312	-9.355	1.00	10.18	A
	ATOM	3254	OG1	THR	A	420	28.971	70.285	-10.228	1.00	10.10	A
	ATOM	3255	CG2	THR	A	420	29.859	72.532	-10.190	1.00	9.96	A
	ATOM	3256	C	THR	A	420	31.224	71.918	-7.699	1.00	10.48	A
10	ATOM	3257	O	THR	A	420	32.033	72.708	-8.187	1.00	10.35	A
	ATOM	3258	N	SER	A	421	30.798	72.009	-6.440	1.00	10.65	A
	ATOM	3259	CA	SER	A	421	31.240	73.077	-5.540	1.00	10.83	A
	ATOM	3260	CB	SER	A	421	30.851	72.737	-4.099	1.00	9.91	A
	ATOM	3261	OG	SER	A	421	29.446	72.581	-3.991	1.00	11.04	A
15	ATOM	3262	C	SER	A	421	32.733	73.390	-5.607	1.00	10.88	A
	ATOM	3263	O	SER	A	421	33.571	72.483	-5.612	1.00	10.61	A
	ATOM	3264	N	ARG	A	422	33.051	74.685	-5.637	1.00	11.06	A
	ATOM	3265	CA	ARG	A	422	34.434	75.158	-5.717	1.00	11.32	A
	ATOM	3266	CB	ARG	A	422	35.163	74.880	-4.400	1.00	12.09	A
20	ATOM	3267	CG	ARG	A	422	34.966	75.954	-3.316	1.00	12.90	A
	ATOM	3268	CD	ARG	A	422	33.507	76.183	-2.913	1.00	13.25	A
	ATOM	3269	NE	ARG	A	422	33.436	77.150	-1.813	1.00	14.01	A
	ATOM	3270	CZ	ARG	A	422	33.503	76.829	-0.524	1.00	14.36	A
	ATOM	3271	NH1	ARG	A	422	33.619	75.563	-0.153	1.00	14.25	A
25	ATOM	3272	NH2	ARG	A	422	33.519	77.783	0.400	1.00	15.13	A
	ATOM	3273	C	ARG	A	422	35.162	74.486	-6.885	1.00	11.33	A
	ATOM	3274	O	ARG	A	422	36.178	73.804	-6.704	1.00	11.04	A
	ATOM	3275	N	PRO	A	423	34.660	74.700	-8.112	1.00	11.11	A
	ATOM	3276	CD	PRO	A	423	33.538	75.594	-8.455	1.00	10.63	A
30	ATOM	3277	CA	PRO	A	423	35.249	74.111	-9.319	1.00	10.85	A
	ATOM	3278	CB	PRO	A	423	34.251	74.496	-10.410	1.00	11.30	A
	ATOM	3279	CG	PRO	A	423	33.748	75.829	-9.944	1.00	12.06	A
	ATOM	3280	C	PRO	A	423	36.678	74.541	-9.644	1.00	10.60	A
	ATOM	3281	O	PRO	A	423	37.405	73.817	-10.320	1.00	9.70	A
35	ATOM	3282	N	TYR	A	424	37.082	75.717	-9.175	1.00	10.48	A
	ATOM	3283	CA	TYR	A	424	38.439	76.192	-9.433	1.00	11.22	A
	ATOM	3284	CB	TYR	A	424	38.658	77.554	-8.769	1.00	12.13	A
	ATOM	3285	CG	TYR	A	424	40.028	78.140	-9.029	1.00	12.96	A
	ATOM	3286	CD1	TYR	A	424	40.274	78.899	-10.170	1.00	13.38	A
40	ATOM	3287	CE1	TYR	A	424	41.533	79.433	-10.421	1.00	14.39	A
	ATOM	3288	CD2	TYR	A	424	41.084	77.922	-8.138	1.00	13.80	A
	ATOM	3289	CE2	TYR	A	424	42.355	78.450	-8.383	1.00	14.53	A
	ATOM	3290	CZ	TYR	A	424	42.568	79.206	-9.526	1.00	14.85	A
	ATOM	3291	OH	TYR	A	424	43.812	79.745	-9.785	1.00	15.46	A
45	ATOM	3292	C	TYR	A	424	39.451	75.196	-8.863	1.00	11.15	A
	ATOM	3293	O	TYR	A	424	40.402	74.787	-9.536	1.00	10.39	A
	ATOM	3294	N	HIS	A	425	39.226	74.794	-7.617	1.00	10.48	A
	ATOM	3295	CA	HIS	A	425	40.125	73.872	-6.933	1.00	10.34	A
	ATOM	3296	CB	HIS	A	425	39.876	73.985	-5.431	1.00	10.89	A
50	ATOM	3297	CG	HIS	A	425	39.851	75.404	-4.959	1.00	11.17	A
	ATOM	3298	CD2	HIS	A	425	38.823	76.274	-4.820	1.00	10.14	A
	ATOM	3299	ND1	HIS	A	425	41.000	76.127	-4.719	1.00	11.79	A
	ATOM	3300	CE1	HIS	A	425	40.682	77.382	-4.460	1.00	10.26	A
	ATOM	3301	NE2	HIS	A	425	39.368	77.499	-4.516	1.00	12.42	A
55	ATOM	3302	C	HIS	A	425	39.985	72.437	-7.431	1.00	10.16	A
	ATOM	3303	O	HIS	A	425	40.941	71.660	-7.372	1.00	9.68	A
	ATOM	3304	N	LYS	A	426	38.800	72.088	-7.923	1.00	10.04	A
	ATOM	3305	CA	LYS	A	426	38.581	70.752	-8.478	1.00	10.39	A
	ATOM	3306	CB	LYS	A	426	37.106	70.563	-8.869	1.00	10.40	A

5	ATOM	3307	CG	LYS	A	426	36.193	70.161	-7.714	1.00	10.43	A
	ATOM	3308	CD	LYS	A	426	34.724	70.107	-8.150	1.00	10.31	A
	ATOM	3309	CE	LYS	A	426	33.871	69.281	-7.183	1.00	10.26	A
	ATOM	3310	NZ	LYS	A	426	33.888	69.790	-5.777	1.00	10.85	A
	ATOM	3311	C	LYS	A	426	39.470	70.629	-9.718	1.00	10.40	A
10	ATOM	3312	O	LYS	A	426	40.073	69.579	-9.969	1.00	10.72	A
	ATOM	3313	N	ARG	A	427	39.549	71.711	-10.491	1.00	9.88	A
	ATOM	3314	CA	ARG	A	427	40.379	71.736	-11.691	1.00	10.35	A
	ATOM	3315	CB	ARG	A	427	40.019	72.960	-12.549	1.00	11.69	A
	ATOM	3316	CG	ARG	A	427	40.997	73.290	-13.671	1.00	12.53	A
15	ATOM	3317	CD	ARG	A	427	41.271	72.122	-14.618	1.00	12.72	A
	ATOM	3318	NE	ARG	A	427	42.265	72.520	-15.613	1.00	12.83	A
	ATOM	3319	CZ	ARG	A	427	43.039	71.683	-16.293	1.00	12.73	A
	ATOM	3320	NH1	ARG	A	427	42.948	70.371	-16.103	1.00	12.04	A
	ATOM	3321	NH2	ARG	A	427	43.928	72.167	-17.152	1.00	13.32	A
20	ATOM	3322	C	ARG	A	427	41.849	71.774	-11.268	1.00	10.25	A
	ATOM	3323	O	ARG	A	427	42.695	71.101	-11.852	1.00	9.51	A
	ATOM	3324	N	MET	A	428	42.145	72.546	-10.230	1.00	10.68	A
	ATOM	3325	CA	MET	A	428	43.514	72.644	-9.738	1.00	11.11	A
	ATOM	3326	CB	MET	A	428	43.571	73.614	-8.556	1.00	12.20	A
25	ATOM	3327	CG	MET	A	428	44.976	73.931	-8.088	1.00	13.51	A
	ATOM	3328	SD	MET	A	428	45.000	75.304	-6.918	1.00	15.32	A
	ATOM	3329	CE	MET	A	428	46.751	75.650	-6.870	1.00	14.47	A
	ATOM	3330	C	MET	A	428	44.019	71.258	-9.321	1.00	10.53	A
	ATOM	3331	O	MET	A	428	45.199	70.934	-9.502	1.00	9.33	A
30	ATOM	3332	N	ASP	A	429	43.118	70.438	-8.780	1.00	9.95	A
	ATOM	3333	CA	ASP	A	429	43.475	69.086	-8.352	1.00	9.37	A
	ATOM	3334	CB	ASP	A	429	42.251	68.358	-7.788	1.00	10.10	A
	ATOM	3335	CG	ASP	A	429	42.535	66.894	-7.467	1.00	10.35	A
	ATOM	3336	OD1	ASP	A	429	42.230	66.024	-8.318	1.00	10.71	A
35	ATOM	3337	OD2	ASP	A	429	43.069	66.616	-6.372	1.00	9.82	A
	ATOM	3338	C	ASP	A	429	44.063	68.268	-9.496	1.00	9.63	A
	ATOM	3339	O	ASP	A	429	45.084	67.598	-9.332	1.00	8.73	A
	ATOM	3340	N	ARG	A	430	43.417	68.328	-10.658	1.00	9.03	A
	ATOM	3341	CA	ARG	A	430	43.876	67.573	-11.820	1.00	8.89	A
40	ATOM	3342	CB	ARG	A	430	42.805	67.604	-12.911	1.00	9.00	A
	ATOM	3343	CG	ARG	A	430	41.515	66.914	-12.507	1.00	9.05	A
	ATOM	3344	CD	ARG	A	430	41.750	65.448	-12.150	1.00	9.51	A
	ATOM	3345	NE	ARG	A	430	40.505	64.684	-12.128	1.00	9.34	A
	ATOM	3346	CZ	ARG	A	430	39.818	64.382	-11.029	1.00	10.40	A
45	ATOM	3347	NH1	ARG	A	430	40.248	64.770	-9.837	1.00	9.53	A
	ATOM	3348	NH2	ARG	A	430	38.683	63.695	-11.129	1.00	10.19	A
	ATOM	3349	C	ARG	A	430	45.201	68.087	-12.371	1.00	9.55	A
	ATOM	3350	O	ARG	A	430	46.020	67.312	-12.878	1.00	8.82	A
	ATOM	3351	N	VAL	A	431	45.407	69.396	-12.282	1.00	8.68	A
50	ATOM	3352	CA	VAL	A	431	46.652	69.989	-12.751	1.00	10.08	A
	ATOM	3353	CB	VAL	A	431	46.580	71.537	-12.726	1.00	10.23	A
	ATOM	3354	CG1	VAL	A	431	47.954	72.137	-13.037	1.00	11.41	A
	ATOM	3355	CG2	VAL	A	431	45.556	72.025	-13.745	1.00	9.77	A
	ATOM	3356	C	VAL	A	431	47.790	69.516	-11.840	1.00	9.68	A
55	ATOM	3357	O	VAL	A	431	48.822	69.046	-12.313	1.00	9.76	A
	ATOM	3358	N	LEU	A	432	47.595	69.628	-10.531	1.00	9.64	A
	ATOM	3359	CA	LEU	A	432	48.632	69.206	-9.596	1.00	9.75	A
	ATOM	3360	CB	LEU	A	432	48.255	69.588	-8.161	1.00	9.87	A
	ATOM	3361	CG	LEU	A	432	49.292	69.268	-7.079	1.00	9.92	A

5	ATOM	3362	CD1	LEU	A	432	50.657	69.850	-7.467	1.00	9.96	A
	ATOM	3363	CD2	LEU	A	432	48.825	69.849	-5.738	1.00	9.99	A
	ATOM	3364	C	LEU	A	432	48.865	67.703	-9.698	1.00	9.62	A
	ATOM	3365	O	LEU	A	432	49.998	67.237	-9.587	1.00	10.09	A
	ATOM	3366	N	MET	A	433	47.795	66.945	-9.917	1.00	9.73	A
10	ATOM	3367	CA	MET	A	433	47.922	65.496	-10.058	1.00	9.45	A
	ATOM	3368	CB	MET	A	433	46.595	64.870	-10.494	1.00	8.69	A
	ATOM	3369	CG	MET	A	433	46.732	63.414	-10.924	1.00	10.44	A
	ATOM	3370	SD	MET	A	433	45.195	62.708	-11.557	1.00	11.59	A
	ATOM	3371	CE	MET	A	433	45.222	63.316	-13.250	1.00	10.74	A
15	ATOM	3372	C	MET	A	433	48.972	65.188	-11.117	1.00	9.60	A
	ATOM	3373	O	MET	A	433	49.849	64.340	-10.918	1.00	9.52	A
	ATOM	3374	N	HIS	A	434	48.876	65.885	-12.246	1.00	9.61	A
	ATOM	3375	CA	HIS	A	434	49.813	65.676	-13.342	1.00	9.91	A
	ATOM	3376	CB	HIS	A	434	49.298	66.325	-14.629	1.00	9.95	A
20	ATOM	3377	CG	HIS	A	434	50.281	66.257	-15.752	1.00	10.58	A
	ATOM	3378	CD2	HIS	A	434	50.721	65.207	-16.487	1.00	9.53	A
	ATOM	3379	ND1	HIS	A	434	51.018	67.347	-16.161	1.00	11.20	A
	ATOM	3380	CE1	HIS	A	434	51.871	66.969	-17.098	1.00	9.32	A
	ATOM	3381	NE2	HIS	A	434	51.712	65.677	-17.313	1.00	11.60	A
25	ATOM	3382	C	HIS	A	434	51.214	66.191	-13.048	1.00	10.24	A
	ATOM	3383	O	HIS	A	434	52.202	65.538	-13.391	1.00	9.05	A
	ATOM	3384	N	TYR	A	435	51.301	67.370	-12.434	1.00	10.57	A
	ATOM	3385	CA	TYR	A	435	52.599	67.943	-12.101	1.00	11.66	A
	ATOM	3386	CB	TYR	A	435	52.436	69.314	-11.436	1.00	13.23	A
30	ATOM	3387	CG	TYR	A	435	52.318	70.480	-12.396	1.00	16.34	A
	ATOM	3388	CD1	TYR	A	435	51.340	70.506	-13.391	1.00	17.44	A
	ATOM	3389	CE1	TYR	A	435	51.199	71.613	-14.237	1.00	18.75	A
	ATOM	3390	CD2	TYR	A	435	53.157	71.588	-12.270	1.00	18.76	A
	ATOM	3391	CE2	TYR	A	435	53.027	72.695	-13.105	1.00	20.26	A
35	ATOM	3392	CZ	TYR	A	435	52.045	72.703	-14.083	1.00	20.16	A
	ATOM	3393	OH	TYR	A	435	51.903	73.818	-14.884	1.00	22.28	A
	ATOM	3394	C	TYR	A	435	53.364	67.018	-11.161	1.00	11.02	A
	ATOM	3395	O	TYR	A	435	54.578	66.868	-11.290	1.00	10.53	A
	ATOM	3396	N	VAL	A	436	52.658	66.400	-10.215	1.00	9.43	A
40	ATOM	3397	CA	VAL	A	436	53.317	65.490	-9.280	1.00	9.55	A
	ATOM	3398	CB	VAL	A	436	52.341	65.008	-8.175	1.00	8.98	A
	ATOM	3399	CG1	VAL	A	436	52.921	63.811	-7.440	1.00	10.24	A
	ATOM	3400	CG2	VAL	A	436	52.094	66.145	-7.185	1.00	8.57	A
	ATOM	3401	C	VAL	A	436	53.885	64.295	-10.039	1.00	10.04	A
45	ATOM	3402	O	VAL	A	436	55.043	63.917	-9.849	1.00	9.58	A
	ATOM	3403	N	ARG	A	437	53.076	63.707	-10.914	1.00	9.63	A
	ATOM	3404	CA	ARG	A	437	53.537	62.566	-11.696	1.00	10.51	A
	ATOM	3405	CB	ARG	A	437	52.416	62.050	-12.607	1.00	10.60	A
	ATOM	3406	CG	ARG	A	437	52.915	61.118	-13.705	1.00	11.44	A
50	ATOM	3407	CD	ARG	A	437	51.778	60.538	-14.544	1.00	11.25	A
	ATOM	3408	NE	ARG	A	437	52.288	59.867	-15.739	1.00	10.78	A
	ATOM	3409	CZ	ARG	A	437	51.558	59.068	-16.516	1.00	10.87	A
	ATOM	3410	NH1	ARG	A	437	50.285	58.831	-16.224	1.00	10.01	A
	ATOM	3411	NH2	ARG	A	437	52.096	58.519	-17.597	1.00	10.75	A
55	ATOM	3412	C	ARG	A	437	54.751	62.935	-12.547	1.00	10.47	A
	ATOM	3413	O	ARG	A	437	55.736	62.194	-12.597	1.00	11.91	A
	ATOM	3414	N	ALA	A	438	54.680	64.080	-13.220	1.00	10.55	A
	ATOM	3415	CA	ALA	A	438	55.771	64.523	-14.086	1.00	10.56	A
	ATOM	3416	CB	ALA	A	438	55.345	65.764	-14.879	1.00	10.46	A

5	ATOM	3417	C	ALA	A	438	57.053	64.807	-13.309	1.00	10.58	A
	ATOM	3418	O	ALA	A	438	58.150	64.467	-13.763	1.00	9.73	A
	ATOM	3419	N	ALA	A	439	56.914	65.418	-12.136	1.00	9.89	A
	ATOM	3420	CA	ALA	A	439	58.074	65.738	-11.310	1.00	9.47	A
	ATOM	3421	CB	ALA	A	439	57.657	66.644	-10.141	1.00	8.79	A
10	ATOM	3422	C	ALA	A	439	58.734	64.463	-10.785	1.00	9.84	A
	ATOM	3423	O	ALA	A	439	59.956	64.320	-10.838	1.00	8.81	A
	ATOM	3424	N	GLU	A	440	57.927	63.540	-10.270	1.00	9.60	A
	ATOM	3425	CA	GLU	A	440	58.469	62.283	-9.757	1.00	10.28	A
	ATOM	3426	CB	GLU	A	440	57.367	61.451	-9.089	1.00	10.51	A
15	ATOM	3427	CG	GLU	A	440	56.796	62.085	-7.833	1.00	11.25	A
	ATOM	3428	CD	GLU	A	440	56.134	61.071	-6.918	1.00	11.92	A
	ATOM	3429	OE1	GLU	A	440	55.012	60.614	-7.222	1.00	12.12	A
	ATOM	3430	OE2	GLU	A	440	56.753	60.718	-5.896	1.00	13.62	A
	ATOM	3431	C	GLU	A	440	59.118	61.461	-10.872	1.00	10.35	A
20	ATOM	3432	O	GLU	A	440	60.171	60.851	-10.674	1.00	11.64	A
	ATOM	3433	N	MET	A	441	58.494	61.437	-12.045	1.00	10.26	A
	ATOM	3434	CA	MET	A	441	59.047	60.666	-13.158	1.00	10.07	A
	ATOM	3435	CB	MET	A	441	58.010	60.511	-14.274	1.00	9.51	A
	ATOM	3436	CG	MET	A	441	58.520	59.763	-15.507	1.00	9.93	A
25	ATOM	3437	SD	MET	A	441	57.250	59.554	-16.783	1.00	10.71	A
	ATOM	3438	CE	MET	A	441	56.191	58.321	-16.011	1.00	11.36	A
	ATOM	3439	C	MET	A	441	60.325	61.281	-13.721	1.00	10.23	A
	ATOM	3440	O	MET	A	441	61.322	60.584	-13.913	1.00	9.58	A
	ATOM	3441	N	LEU	A	442	60.304	62.585	-13.982	1.00	10.26	A
30	ATOM	3442	CA	LEU	A	442	61.483	63.251	-14.529	1.00	11.10	A
	ATOM	3443	CB	LEU	A	442	61.175	64.719	-14.846	1.00	11.61	A
	ATOM	3444	CG	LEU	A	442	60.559	64.982	-16.226	1.00	12.48	A
	ATOM	3445	CD1	LEU	A	442	59.975	66.389	-16.271	1.00	12.40	A
	ATOM	3446	CD2	LEU	A	442	61.614	64.804	-17.305	1.00	12.40	A
35	ATOM	3447	C	LEU	A	442	62.697	63.168	-13.616	1.00	11.57	A
	ATOM	3448	O	LEU	A	442	63.826	63.034	-14.089	1.00	11.69	A
	ATOM	3449	N	SER	A	443	62.474	63.228	-12.307	1.00	11.46	A
	ATOM	3450	CA	SER	A	443	63.590	63.172	-11.373	1.00	11.37	A
	ATOM	3451	CB	SER	A	443	63.257	63.967	-10.104	1.00	11.11	A
40	ATOM	3452	OG	SER	A	443	62.166	63.396	-9.405	1.00	10.78	A
	ATOM	3453	C	SER	A	443	64.003	61.749	-10.999	1.00	11.94	A
	ATOM	3454	O	SER	A	443	65.064	61.545	-10.403	1.00	11.73	A
	ATOM	3455	N	ALA	A	444	63.177	60.769	-11.360	1.00	11.28	A
	ATOM	3456	CA	ALA	A	444	63.458	59.368	-11.043	1.00	11.76	A
45	ATOM	3457	CB	ALA	A	444	62.204	58.521	-11.264	1.00	11.73	A
	ATOM	3458	C	ALA	A	444	64.618	58.782	-11.846	1.00	12.36	A
	ATOM	3459	O	ALA	A	444	65.267	57.835	-11.402	1.00	12.49	A
	ATOM	3460	N	TRP	A	445	64.880	59.345	-13.021	1.00	12.37	A
	ATOM	3461	CA	TRP	A	445	65.948	58.845	-13.881	1.00	13.43	A
50	ATOM	3462	CB	TRP	A	445	65.945	59.593	-15.218	1.00	12.38	A
	ATOM	3463	CG	TRP	A	445	64.666	59.427	-15.968	1.00	12.06	A
	ATOM	3464	CD2	TRP	A	445	64.217	58.246	-16.645	1.00	11.74	A
	ATOM	3465	CE2	TRP	A	445	62.938	58.528	-17.171	1.00	11.42	A
	ATOM	3466	CE3	TRP	A	445	64.772	56.975	-16.857	1.00	12.15	A
55	ATOM	3467	CD1	TRP	A	445	63.671	60.351	-16.109	1.00	11.63	A
	ATOM	3468	NE1	TRP	A	445	62.630	59.819	-16.829	1.00	11.30	A
	ATOM	3469	CZ2	TRP	A	445	62.198	57.584	-17.901	1.00	11.44	A
	ATOM	3470	CZ3	TRP	A	445	64.037	56.034	-17.581	1.00	12.95	A
	ATOM	3471	CH2	TRP	A	445	62.762	56.348	-18.094	1.00	12.11	A

5	ATOM	3472	C	TRP	A	445	67.333	58.917	-13.252	1.00	14.15	A
	ATOM	3473	O	TRP	A	445	68.201	58.097	-13.561	1.00	14.34	A
	ATOM	3474	N	HIS	A	446	67.543	59.894	-12.375	1.00	14.87	A
	ATOM	3475	CA	HIS	A	446	68.831	60.046	-11.709	1.00	15.74	A
	ATOM	3476	CB	HIS	A	446	69.462	61.414	-11.992	1.00	16.67	A
10	ATOM	3477	CG	HIS	A	446	69.875	61.625	-13.413	1.00	18.24	A
	ATOM	3478	CD2	HIS	A	446	71.044	61.370	-14.047	1.00	19.05	A
	ATOM	3479	ND1	HIS	A	446	69.047	62.201	-14.350	1.00	18.92	A
	ATOM	3480	CE1	HIS	A	446	69.688	62.296	-15.501	1.00	19.41	A
	ATOM	3481	NE2	HIS	A	446	70.901	61.799	-15.345	1.00	19.48	A
15	ATOM	3482	C	HIS	A	446	68.711	59.942	-10.201	1.00	16.41	A
	ATOM	3483	O	HIS	A	446	67.625	60.071	-9.635	1.00	15.17	A
	ATOM	3484	N	SER	A	447	69.855	59.714	-9.566	1.00	16.74	A
	ATOM	3485	CA	SER	A	447	69.946	59.673	-8.120	1.00	17.65	A
	ATOM	3486	CB	SER	A	447	70.995	58.647	-7.685	1.00	18.93	A
20	ATOM	3487	OG	SER	A	447	70.995	58.488	-6.280	1.00	20.59	A
	ATOM	3488	C	SER	A	447	70.432	61.099	-7.850	1.00	17.81	A
	ATOM	3489	O	SER	A	447	71.333	61.583	-8.538	1.00	18.00	A
	ATOM	3490	N	TRP	A	448	69.832	61.789	-6.886	1.00	17.24	A
	ATOM	3491	CA	TRP	A	448	70.232	63.165	-6.619	1.00	17.67	A
25	ATOM	3492	CB	TRP	A	448	69.020	64.097	-6.707	1.00	16.94	A
	ATOM	3493	CG	TRP	A	448	68.372	64.127	-8.058	1.00	15.88	A
	ATOM	3494	CD2	TRP	A	448	68.520	65.144	-9.056	1.00	15.36	A
	ATOM	3495	CE2	TRP	A	448	67.742	64.752	-10.168	1.00	14.69	A
	ATOM	3496	CE3	TRP	A	448	69.236	66.350	-9.120	1.00	14.92	A
30	ATOM	3497	CD1	TRP	A	448	67.537	63.190	-8.587	1.00	15.27	A
	ATOM	3498	NE1	TRP	A	448	67.154	63.555	-9.854	1.00	14.78	A
	ATOM	3499	CZ2	TRP	A	448	67.659	65.520	-11.332	1.00	14.71	A
	ATOM	3500	CZ3	TRP	A	448	69.154	67.116	-10.278	1.00	15.23	A
	ATOM	3501	CH2	TRP	A	448	68.368	66.696	-11.370	1.00	14.57	A
35	ATOM	3502	C	TRP	A	448	70.919	63.392	-5.283	1.00	18.42	A
	ATOM	3503	O	TRP	A	448	70.585	62.760	-4.284	1.00	17.49	A
	ATOM	3504	N	ASP	A	449	71.880	64.312	-5.282	1.00	20.05	A
	ATOM	3505	CA	ASP	A	449	72.605	64.659	-4.068	1.00	21.64	A
	ATOM	3506	CB	ASP	A	449	73.759	65.612	-4.397	1.00	23.78	A
40	ATOM	3507	CG	ASP	A	449	74.633	65.915	-3.192	1.00	26.46	A
	ATOM	3508	OD1	ASP	A	449	74.187	66.658	-2.290	1.00	27.14	A
	ATOM	3509	OD2	ASP	A	449	75.772	65.402	-3.146	1.00	28.75	A
	ATOM	3510	C	ASP	A	449	71.607	65.344	-3.140	1.00	21.51	A
	ATOM	3511	O	ASP	A	449	70.723	66.066	-3.599	1.00	21.20	A
45	ATOM	3512	N	GLY	A	450	71.743	65.109	-1.839	1.00	21.76	A
	ATOM	3513	CA	GLY	A	450	70.833	65.708	-0.881	1.00	21.96	A
	ATOM	3514	C	GLY	A	450	70.708	67.216	-0.997	1.00	22.35	A
	ATOM	3515	O	GLY	A	450	69.662	67.782	-0.677	1.00	22.04	A
	ATOM	3516	N	MET	A	451	71.769	67.872	-1.454	1.00	21.87	A
50	ATOM	3517	CA	MET	A	451	71.756	69.323	-1.593	1.00	22.85	A
	ATOM	3518	CB	MET	A	451	73.156	69.840	-1.937	1.00	25.58	A
	ATOM	3519	CG	MET	A	451	74.196	69.618	-0.856	1.00	29.68	A
	ATOM	3520	SD	MET	A	451	75.742	70.474	-1.245	1.00	35.87	A
	ATOM	3521	CE	MET	A	451	76.613	69.212	-2.205	1.00	33.78	A
55	ATOM	3522	C	MET	A	451	70.773	69.820	-2.649	1.00	21.28	A
	ATOM	3523	O	MET	A	451	70.398	70.990	-2.644	1.00	21.56	A
	ATOM	3524	N	ALA	A	452	70.366	68.937	-3.554	1.00	20.19	A
	ATOM	3525	CA	ALA	A	452	69.434	69.314	-4.614	1.00	19.23	A
	ATOM	3526	CB	ALA	A	452	69.452	68.267	-5.724	1.00	19.32	A

	ATOM	3527	C	ALA	A	452	68.017	69.482	-4.077	1.00	18.38	A
	ATOM	3528	O	ALA	A	452	67.146	70.024	-4.760	1.00	17.97	A
	ATOM	3529	N	ARG	A	453	67.795	69.004	-2.856	1.00	17.50	A
5	ATOM	3530	CA	ARG	A	453	66.488	69.096	-2.207	1.00	17.01	A
	ATOM	3531	CB	ARG	A	453	66.180	70.559	-1.870	1.00	18.00	A
	ATOM	3532	CG	ARG	A	453	67.249	71.225	-1.012	1.00	19.55	A
	ATOM	3533	CD	ARG	A	453	66.942	72.698	-0.774	1.00	21.42	A
	ATOM	3534	NE	ARG	A	453	65.716	72.891	-0.005	1.00	22.14	A
10	ATOM	3535	CZ	ARG	A	453	65.172	74.078	0.251	1.00	23.68	A
	ATOM	3536	NH1	ARG	A	453	65.745	75.187	-0.202	1.00	24.14	A
	ATOM	3537	NH2	ARG	A	453	64.054	74.156	0.963	1.00	23.59	A
	ATOM	3538	C	ARG	A	453	65.360	68.510	-3.058	1.00	16.24	A
	ATOM	3539	O	ARG	A	453	64.227	68.987	-3.016	1.00	16.48	A
15	ATOM	3540	N	ILE	A	454	65.673	67.471	-3.826	1.00	15.16	A
	ATOM	3541	CA	ILE	A	454	64.681	66.830	-4.679	1.00	14.83	A
	ATOM	3542	CB	ILE	A	454	65.349	65.848	-5.667	1.00	15.09	A
	ATOM	3543	CG2	ILE	A	454	64.286	65.111	-6.477	1.00	14.91	A
	ATOM	3544	CG1	ILE	A	454	66.312	66.611	-6.587	1.00	14.75	A
20	ATOM	3545	CD1	ILE	A	454	65.660	67.697	-7.432	1.00	14.56	A
	ATOM	3546	C	ILE	A	454	63.638	66.077	-3.852	1.00	14.81	A
	ATOM	3547	O	ILE	A	454	62.438	66.309	-4.002	1.00	14.37	A
	ATOM	3548	N	GLU	A	455	64.095	65.179	-2.981	1.00	14.40	A
	ATOM	3549	CA	GLU	A	455	63.178	64.410	-2.142	1.00	14.75	A
25	ATOM	3550	CB	GLU	A	455	63.944	63.458	-1.212	1.00	15.34	A
	ATOM	3551	CG	GLU	A	455	64.535	62.225	-1.883	1.00	14.65	A
	ATOM	3552	CD	GLU	A	455	65.880	62.484	-2.539	1.00	16.24	A
	ATOM	3553	OE1	GLU	A	455	66.344	63.646	-2.526	1.00	16.23	A
	ATOM	3554	OE2	GLU	A	455	66.473	61.518	-3.068	1.00	14.90	A
30	ATOM	3555	C	GLU	A	455	62.323	65.349	-1.299	1.00	14.60	A
	ATOM	3556	O	GLU	A	455	61.129	65.116	-1.103	1.00	13.65	A
	ATOM	3557	N	GLU	A	456	62.948	66.411	-0.800	1.00	14.87	A
	ATOM	3558	CA	GLU	A	456	62.258	67.394	0.025	1.00	15.38	A
	ATOM	3559	CB	GLU	A	456	63.229	68.502	0.432	1.00	17.41	A
35	ATOM	3560	CG	GLU	A	456	62.669	69.473	1.454	1.00	20.04	A
	ATOM	3561	CD	GLU	A	456	63.543	70.699	1.627	1.00	21.34	A
	ATOM	3562	OE1	GLU	A	456	64.773	70.581	1.457	1.00	22.77	A
	ATOM	3563	OE2	GLU	A	456	63.002	71.780	1.941	1.00	22.99	A
	ATOM	3564	C	GLU	A	456	61.070	68.011	-0.713	1.00	14.91	A
40	ATOM	3565	O	GLU	A	456	59.940	67.995	-0.222	1.00	14.66	A
	ATOM	3566	N	ARG	A	457	61.333	68.563	-1.893	1.00	14.02	A
	ATOM	3567	CA	ARG	A	457	60.281	69.196	-2.686	1.00	13.76	A
	ATOM	3568	CB	ARG	A	457	60.895	69.878	-3.917	1.00	14.11	A
	ATOM	3569	CG	ARG	A	457	61.308	71.340	-3.700	1.00	15.77	A
45	ATOM	3570	CD	ARG	A	457	62.227	71.524	-2.493	1.00	18.41	A
	ATOM	3571	NE	ARG	A	457	62.485	72.936	-2.197	1.00	19.24	A
	ATOM	3572	CZ	ARG	A	457	63.341	73.709	-2.864	1.00	20.83	A
	ATOM	3573	NH1	ARG	A	457	64.041	73.217	-3.879	1.00	20.68	A
	ATOM	3574	NH2	ARG	A	457	63.497	74.982	-2.515	1.00	21.40	A
50	ATOM	3575	C	ARG	A	457	59.186	68.216	-3.110	1.00	12.75	A
	ATOM	3576	O	ARG	A	457	58.004	68.561	-3.105	1.00	11.81	A
	ATOM	3577	N	LEU	A	458	59.571	66.996	-3.470	1.00	11.91	A
	ATOM	3578	CA	LEU	A	458	58.586	66.002	-3.886	1.00	12.47	A
	ATOM	3579	CB	LEU	A	458	59.279	64.788	-4.511	1.00	12.02	A
	ATOM	3580	CG	LEU	A	458	59.998	65.089	-5.834	1.00	11.94	A
55	ATOM	3581	CD1	LEU	A	458	60.693	63.829	-6.341	1.00	11.69	A

5	ATOM	3582	CD2	LEU	A	458	58.985	65.601	-6.866	1.00	11.22	A
	ATOM	3583	C	LEU	A	458	57.696	65.559	-2.727	1.00	12.74	A
	ATOM	3584	O	LEU	A	458	56.505	65.318	-2.917	1.00	12.98	A
	ATOM	3585	N	GLU	A	459	58.265	65.451	-1.530	1.00	12.29	A
	ATOM	3586	CA	GLU	A	459	57.473	65.049	-0.374	1.00	13.18	A
	ATOM	3587	CB	GLU	A	459	58.365	64.846	0.857	1.00	14.23	A
	ATOM	3588	CG	GLU	A	459	57.595	64.361	2.088	1.00	16.92	A
	ATOM	3589	CD	GLU	A	459	58.497	63.766	3.159	1.00	18.01	A
	ATOM	3590	OE1	GLU	A	459	59.210	64.532	3.834	1.00	19.27	A
	ATOM	3591	OE2	GLU	A	459	58.497	62.525	3.316	1.00	18.89	A
10	ATOM	3592	C	GLU	A	459	56.428	66.126	-0.096	1.00	12.90	A
	ATOM	3593	O	GLU	A	459	55.259	65.824	0.153	1.00	11.83	A
	ATOM	3594	N	GLN	A	460	56.847	67.388	-0.147	1.00	12.61	A
	ATOM	3595	CA	GLN	A	460	55.921	68.490	0.081	1.00	13.10	A
	ATOM	3596	CB	GLN	A	460	56.653	69.829	-0.041	1.00	15.39	A
15	ATOM	3597	CG	GLN	A	460	55.765	71.037	0.211	1.00	17.90	A
	ATOM	3598	CD	GLN	A	460	56.432	72.346	-0.153	1.00	20.12	A
	ATOM	3599	OE1	GLN	A	460	55.906	73.421	0.135	1.00	23.01	A
	ATOM	3600	NE2	GLN	A	460	57.590	72.265	-0.799	1.00	20.79	A
	ATOM	3601	C	GLN	A	460	54.788	68.428	-0.950	1.00	12.41	A
20	ATOM	3602	O	GLN	A	460	53.612	68.505	-0.602	1.00	11.47	A
	ATOM	3603	N	ALA	A	461	55.145	68.278	-2.222	1.00	11.44	A
	ATOM	3604	CA	ALA	A	461	54.136	68.217	-3.275	1.00	10.82	A
	ATOM	3605	CB	ALA	A	461	54.810	68.096	-4.646	1.00	10.93	A
	ATOM	3606	C	ALA	A	461	53.147	67.069	-3.068	1.00	10.35	A
25	ATOM	3607	O	ALA	A	461	51.935	67.270	-3.152	1.00	10.11	A
	ATOM	3608	N	ARG	A	462	53.659	65.869	-2.801	1.00	10.22	A
	ATOM	3609	CA	ARG	A	462	52.797	64.708	-2.587	1.00	10.59	A
	ATOM	3610	CB	ARG	A	462	53.630	63.443	-2.331	1.00	9.97	A
	ATOM	3611	CG	ARG	A	462	54.383	62.883	-3.541	1.00	9.98	A
30	ATOM	3612	CD	ARG	A	462	54.835	61.446	-3.254	1.00	10.20	A
	ATOM	3613	NE	ARG	A	462	55.747	61.380	-2.113	1.00	10.56	A
	ATOM	3614	CZ	ARG	A	462	57.066	61.530	-2.202	1.00	11.65	A
	ATOM	3615	NH1	ARG	A	462	57.635	61.749	-3.383	1.00	11.19	A
	ATOM	3616	NH2	ARG	A	462	57.818	61.469	-1.110	1.00	11.26	A
35	ATOM	3617	C	ARG	A	462	51.860	64.925	-1.400	1.00	11.75	A
	ATOM	3618	O	ARG	A	462	50.680	64.581	-1.451	1.00	10.88	A
	ATOM	3619	N	ARG	A	463	52.390	65.498	-0.325	1.00	11.61	A
	ATOM	3620	CA	ARG	A	463	51.582	65.721	0.863	1.00	11.89	A
	ATOM	3621	CB	ARG	A	463	52.498	66.003	2.056	1.00	11.99	A
40	ATOM	3622	CG	ARG	A	463	53.276	64.751	2.436	1.00	12.82	A
	ATOM	3623	CD	ARG	A	463	54.199	64.923	3.623	1.00	14.07	A
	ATOM	3624	NE	ARG	A	463	54.724	63.620	4.023	1.00	15.02	A
	ATOM	3625	CZ	ARG	A	463	55.481	63.409	5.094	1.00	15.38	A
	ATOM	3626	NH1	ARG	A	463	55.814	64.422	5.882	1.00	15.01	A
45	ATOM	3627	NH2	ARG	A	463	55.893	62.180	5.381	1.00	15.17	A
	ATOM	3628	C	ARG	A	463	50.497	66.787	0.730	1.00	11.52	A
	ATOM	3629	O	ARG	A	463	49.401	66.612	1.259	1.00	11.19	A
	ATOM	3630	N	GLU	A	464	50.777	67.881	0.024	1.00	11.08	A
	ATOM	3631	CA	GLU	A	464	49.755	68.913	-0.137	1.00	11.07	A
50	ATOM	3632	CB	GLU	A	464	50.361	70.206	-0.686	1.00	12.30	A
	ATOM	3633	CG	GLU	A	464	51.509	70.752	0.158	1.00	14.44	A
	ATOM	3634	CD	GLU	A	464	51.083	71.173	1.560	1.00	15.33	A
	ATOM	3635	OE1	GLU	A	464	50.043	70.696	2.058	1.00	16.27	A
	ATOM	3636	OE2	GLU	A	464	51.804	71.981	2.176	1.00	17.15	A

5	ATOM	3637	C	GLU	A	464	48.653	68.409	-1.067	1.00	10.16	A
	ATOM	3638	O	GLU	A	464	47.481	68.714	-0.861	1.00	10.20	A
	ATOM	3639	N	LEU	A	465	49.022	67.646	-2.094	1.00	10.06	A
	ATOM	3640	CA	LEU	A	465	48.017	67.101	-3.005	1.00	10.13	A
	ATOM	3641	CB	LEU	A	465	48.668	66.476	-4.247	1.00	9.70	A
10	ATOM	3642	CG	LEU	A	465	47.695	65.782	-5.215	1.00	9.35	A
	ATOM	3643	CD1	LEU	A	465	46.662	66.790	-5.716	1.00	9.18	A
	ATOM	3644	CD2	LEU	A	465	48.459	65.178	-6.389	1.00	8.95	A
	ATOM	3645	C	LEU	A	465	47.215	66.033	-2.263	1.00	9.87	A
	ATOM	3646	O	LEU	A	465	45.994	65.955	-2.400	1.00	9.64	A
15	ATOM	3647	N	SER	A	466	47.905	65.218	-1.468	1.00	9.22	A
	ATOM	3648	CA	SER	A	466	47.237	64.161	-0.713	1.00	9.23	A
	ATOM	3649	CB	SER	A	466	48.261	63.303	0.038	1.00	9.47	A
	ATOM	3650	OG	SER	A	466	49.045	62.538	-0.864	1.00	9.64	A
	ATOM	3651	C	SER	A	466	46.252	64.764	0.279	1.00	9.71	A
20	ATOM	3652	O	SER	A	466	45.148	64.249	0.467	1.00	9.34	A
	ATOM	3653	N	LEU	A	467	46.656	65.861	0.910	1.00	9.09	A
	ATOM	3654	CA	LEU	A	467	45.795	66.521	1.879	1.00	9.59	A
	ATOM	3655	CB	LEU	A	467	46.501	67.744	2.473	1.00	9.34	A
	ATOM	3656	CG	LEU	A	467	45.771	68.418	3.636	1.00	11.49	A
25	ATOM	3657	CD1	LEU	A	467	45.861	67.523	4.867	1.00	12.53	A
	ATOM	3658	CD2	LEU	A	467	46.389	69.786	3.924	1.00	11.51	A
	ATOM	3659	C	LEU	A	467	44.480	66.957	1.233	1.00	9.10	A
	ATOM	3660	O	LEU	A	467	43.405	66.769	1.809	1.00	8.58	A
	ATOM	3661	N	PHE	A	468	44.569	67.521	0.032	1.00	8.59	A
30	ATOM	3662	CA	PHE	A	468	43.386	68.005	-0.672	1.00	9.47	A
	ATOM	3663	CB	PHE	A	468	43.792	68.803	-1.918	1.00	9.60	A
	ATOM	3664	CG	PHE	A	468	42.667	69.600	-2.519	1.00	10.53	A
	ATOM	3665	CD1	PHE	A	468	41.953	70.514	-1.744	1.00	10.08	A
	ATOM	3666	CD2	PHE	A	468	42.310	69.434	-3.854	1.00	9.96	A
35	ATOM	3667	CE1	PHE	A	468	40.898	71.250	-2.291	1.00	9.64	A
	ATOM	3668	CE2	PHE	A	468	41.256	70.166	-4.409	1.00	9.46	A
	ATOM	3669	CZ	PHE	A	468	40.549	71.076	-3.622	1.00	8.13	A
	ATOM	3670	C	PHE	A	468	42.405	66.901	-1.060	1.00	9.54	A
	ATOM	3671	O	PHE	A	468	41.261	67.186	-1.400	1.00	10.30	A
40	ATOM	3672	N	GLN	A	469	42.843	65.644	-1.012	1.00	9.36	A
	ATOM	3673	CA	GLN	A	469	41.951	64.536	-1.343	1.00	9.71	A
	ATOM	3674	CB	GLN	A	469	42.743	63.243	-1.555	1.00	9.78	A
	ATOM	3675	CG	GLN	A	469	43.803	63.345	-2.645	1.00	10.20	A
	ATOM	3676	CD	GLN	A	469	43.265	63.975	-3.917	1.00	9.47	A
45	ATOM	3677	OE1	GLN	A	469	43.797	64.979	-4.397	1.00	12.79	A
	ATOM	3678	NE2	GLN	A	469	42.207	63.394	-4.468	1.00	8.19	A
	ATOM	3679	C	GLN	A	469	40.921	64.325	-0.234	1.00	9.75	A
	ATOM	3680	O	GLN	A	469	39.977	63.545	-0.392	1.00	10.11	A
	ATOM	3681	N	HIS	A	470	41.111	65.023	0.884	1.00	9.95	A
50	ATOM	3682	CA	HIS	A	470	40.200	64.937	2.029	1.00	9.97	A
	ATOM	3683	CB	HIS	A	470	40.571	65.989	3.082	1.00	10.40	A
	ATOM	3684	CG	HIS	A	470	39.592	66.076	4.213	1.00	11.67	A
	ATOM	3685	CD2	HIS	A	470	38.969	65.109	4.926	1.00	11.04	A
	ATOM	3686	ND1	HIS	A	470	39.127	67.276	4.709	1.00	13.03	A
55	ATOM	3687	CE1	HIS	A	470	38.258	67.043	5.676	1.00	10.74	A
	ATOM	3688	NE2	HIS	A	470	38.144	65.736	5.828	1.00	13.35	A
	ATOM	3689	C	HIS	A	470	38.754	65.165	1.583	1.00	10.37	A
	ATOM	3690	O	HIS	A	470	38.511	65.900	0.622	1.00	9.96	A
	ATOM	3691	N	HIS	A	471	37.797	64.560	2.289	1.00	10.77	A

5	ATOM	3692	CA	HIS	A	471	36.391	64.709	1.923	1.00	11.23	A
	ATOM	3693	CB	HIS	A	471	35.525	63.621	2.593	1.00	11.19	A
	ATOM	3694	CG	HIS	A	471	35.686	63.532	4.078	1.00	10.36	A
	ATOM	3695	CD2	HIS	A	471	35.001	64.122	5.086	1.00	10.59	A
	ATOM	3696	ND1	HIS	A	471	36.646	62.744	4.678	1.00	10.71	A
	ATOM	3697	CE1	HIS	A	471	36.545	62.853	5.990	1.00	10.31	A
	ATOM	3698	NE2	HIS	A	471	35.555	63.683	6.263	1.00	9.96	A
	ATOM	3699	C	HIS	A	471	35.773	66.099	2.147	1.00	11.46	A
10	ATOM	3700	O	HIS	A	471	34.555	66.270	2.012	1.00	10.89	A
	ATOM	3701	N	ASP	A	472	36.606	67.080	2.502	1.00	11.51	A
	ATOM	3702	CA	ASP	A	472	36.163	68.467	2.651	1.00	11.16	A
	ATOM	3703	CB	ASP	A	472	36.184	68.929	4.108	1.00	12.11	A
15	ATOM	3704	CG	ASP	A	472	35.075	68.316	4.919	1.00	11.49	A
	ATOM	3705	OD1	ASP	A	472	33.913	68.402	4.475	1.00	12.78	A
	ATOM	3706	OD2	ASP	A	472	35.363	67.755	5.991	1.00	12.45	A
	ATOM	3707	C	ASP	A	472	37.112	69.337	1.834	1.00	11.58	A
	ATOM	3708	O	ASP	A	472	37.043	70.568	1.870	1.00	11.63	A
20	ATOM	3709	N	GLY	A	473	38.005	68.679	1.103	1.00	10.90	A
	ATOM	3710	CA	GLY	A	473	38.956	69.394	0.275	1.00	10.57	A
	ATOM	3711	C	GLY	A	473	38.445	69.511	-1.145	1.00	10.47	A
	ATOM	3712	O	GLY	A	473	37.745	70.464	-1.483	1.00	10.79	A
	ATOM	3713	N	ILE	A	474	38.783	68.529	-1.976	1.00	10.32	A
25	ATOM	3714	CA	ILE	A	474	38.368	68.518	-3.375	1.00	10.66	A
	ATOM	3715	CB	ILE	A	474	38.904	67.239	-4.090	1.00	11.01	A
	ATOM	3716	CG2	ILE	A	474	38.293	65.985	-3.462	1.00	10.23	A
	ATOM	3717	CG1	ILE	A	474	38.614	67.314	-5.591	1.00	11.39	A
	ATOM	3718	CD1	ILE	A	474	39.203	66.158	-6.393	1.00	11.29	A
30	ATOM	3719	C	ILE	A	474	36.844	68.618	-3.536	1.00	10.82	A
	ATOM	3720	O	ILE	A	474	36.344	69.060	-4.573	1.00	10.27	A
	ATOM	3721	N	THR	A	475	36.119	68.220	-2.495	1.00	10.66	A
	ATOM	3722	CA	THR	A	475	34.656	68.256	-2.483	1.00	11.04	A
	ATOM	3723	CB	THR	A	475	34.108	67.616	-1.205	1.00	10.92	A
35	ATOM	3724	OG1	THR	A	475	34.649	68.312	-0.075	1.00	10.89	A
	ATOM	3725	CG2	THR	A	475	34.493	66.133	-1.123	1.00	9.32	A
	ATOM	3726	C	THR	A	475	34.107	69.684	-2.520	1.00	11.15	A
	ATOM	3727	O	THR	A	475	32.939	69.899	-2.862	1.00	11.97	A
	ATOM	3728	N	GLY	A	476	34.940	70.649	-2.146	1.00	10.97	A
40	ATOM	3729	CA	GLY	A	476	34.500	72.034	-2.124	1.00	11.23	A
	ATOM	3730	C	GLY	A	476	33.508	72.291	-0.999	1.00	11.45	A
	ATOM	3731	O	GLY	A	476	32.622	73.137	-1.127	1.00	11.61	A
	ATOM	3732	N	THR	A	477	33.656	71.569	0.110	1.00	11.28	A
	ATOM	3733	CA	THR	A	477	32.748	71.728	1.241	1.00	11.26	A
45	ATOM	3734	CB	THR	A	477	32.089	70.369	1.618	1.00	11.46	A
	ATOM	3735	OG1	THR	A	477	33.106	69.399	1.905	1.00	10.63	A
	ATOM	3736	CG2	THR	A	477	31.223	69.864	0.468	1.00	11.11	A
	ATOM	3737	C	THR	A	477	33.370	72.333	2.502	1.00	12.05	A
	ATOM	3738	O	THR	A	477	32.849	72.140	3.601	1.00	12.10	A
50	ATOM	3739	N	ALA	A	478	34.469	73.072	2.354	1.00	12.04	A
	ATOM	3740	CA	ALA	A	478	35.116	73.694	3.512	1.00	12.48	A
	ATOM	3741	CB	ALA	A	478	36.632	73.485	3.445	1.00	11.99	A
	ATOM	3742	C	ALA	A	478	34.800	75.188	3.589	1.00	12.76	A
	ATOM	3743	O	ALA	A	478	34.332	75.780	2.620	1.00	12.65	A
55	ATOM	3744	N	LYS	A	479	35.049	75.805	4.740	1.00	13.47	A
	ATOM	3745	CA	LYS	A	479	34.783	77.235	4.860	1.00	13.72	A
	ATOM	3746	CB	LYS	A	479	34.926	77.699	6.316	1.00	15.00	A

5	ATOM	3747	CG	LYS	A	479	33.901	77.059	7.254	1.00	17.01	A
	ATOM	3748	CD	LYS	A	479	33.941	77.653	8.660	1.00	18.59	A
	ATOM	3749	CE	LYS	A	479	33.028	78.861	8.808	1.00	19.93	A
	ATOM	3750	NZ	LYS	A	479	31.570	78.514	8.789	1.00	18.25	A
	ATOM	3751	C	LYS	A	479	35.761	77.984	3.963	1.00	13.63	A
10	ATOM	3752	O	LYS	A	479	36.827	77.471	3.624	1.00	12.30	A
	ATOM	3753	N	THR	A	480	35.390	79.202	3.591	1.00	13.88	A
	ATOM	3754	CA	THR	A	480	36.197	80.038	2.713	1.00	13.85	A
	ATOM	3755	CB	THR	A	480	35.608	81.462	2.643	1.00	14.71	A
	ATOM	3756	OG1	THR	A	480	34.264	81.386	2.162	1.00	15.03	A
15	ATOM	3757	CG2	THR	A	480	36.430	82.352	1.701	1.00	15.64	A
	ATOM	3758	C	THR	A	480	37.687	80.141	3.033	1.00	13.99	A
	ATOM	3759	O	THR	A	480	38.516	79.981	2.138	1.00	13.75	A
	ATOM	3760	N	HIS	A	481	38.039	80.400	4.290	1.00	13.63	A
	ATOM	3761	CA	HIS	A	481	39.452	80.537	4.628	1.00	13.00	A
20	ATOM	3762	CB	HIS	A	481	39.633	81.227	5.994	1.00	14.49	A
	ATOM	3763	CG	HIS	A	481	39.486	80.319	7.176	1.00	15.14	A
	ATOM	3764	CD2	HIS	A	481	40.412	79.799	8.016	1.00	15.70	A
	ATOM	3765	ND1	HIS	A	481	38.264	79.867	7.626	1.00	15.87	A
	ATOM	3766	CE1	HIS	A	481	38.445	79.109	8.693	1.00	16.85	A
25	ATOM	3767	NE2	HIS	A	481	39.739	79.051	8.949	1.00	15.85	A
	ATOM	3768	C	HIS	A	481	40.205	79.211	4.588	1.00	12.69	A
	ATOM	3769	O	HIS	A	481	41.429	79.194	4.445	1.00	11.59	A
	ATOM	3770	N	VAL	A	482	39.474	78.104	4.698	1.00	11.97	A
	ATOM	3771	CA	VAL	A	482	40.092	76.775	4.644	1.00	12.15	A
30	ATOM	3772	CB	VAL	A	482	39.162	75.704	5.261	1.00	11.50	A
	ATOM	3773	CG1	VAL	A	482	39.836	74.327	5.235	1.00	9.91	A
	ATOM	3774	CG2	VAL	A	482	38.828	76.093	6.699	1.00	12.67	A
	ATOM	3775	C	VAL	A	482	40.381	76.450	3.176	1.00	12.24	A
	ATOM	3776	O	VAL	A	482	41.426	75.892	2.844	1.00	12.15	A
35	ATOM	3777	N	VAL	A	483	39.451	76.809	2.297	1.00	12.27	A
	ATOM	3778	CA	VAL	A	483	39.641	76.592	0.867	1.00	12.33	A
	ATOM	3779	CB	VAL	A	483	38.426	77.111	0.063	1.00	12.56	A
	ATOM	3780	CG1	VAL	A	483	38.709	77.032	-1.432	1.00	13.36	A
	ATOM	3781	CG2	VAL	A	483	37.187	76.282	0.416	1.00	12.27	A
40	ATOM	3782	C	VAL	A	483	40.892	77.366	0.447	1.00	13.46	A
	ATOM	3783	O	VAL	A	483	41.699	76.890	-0.353	1.00	13.10	A
	ATOM	3784	N	VAL	A	484	41.053	78.562	1.004	1.00	13.68	A
	ATOM	3785	CA	VAL	A	484	42.215	79.382	0.696	1.00	14.31	A
	ATOM	3786	CB	VAL	A	484	42.125	80.762	1.375	1.00	14.14	A
45	ATOM	3787	CG1	VAL	A	484	43.458	81.499	1.254	1.00	14.60	A
	ATOM	3788	CG2	VAL	A	484	41.016	81.573	0.726	1.00	14.59	A
	ATOM	3789	C	VAL	A	484	43.487	78.674	1.144	1.00	14.08	A
	ATOM	3790	O	VAL	A	484	44.489	78.683	0.430	1.00	14.29	A
	ATOM	3791	N	ASP	A	485	43.447	78.052	2.320	1.00	13.62	A
50	ATOM	3792	CA	ASP	A	485	44.614	77.332	2.819	1.00	13.11	A
	ATOM	3793	CB	ASP	A	485	44.349	76.759	4.213	1.00	13.58	A
	ATOM	3794	CG	ASP	A	485	45.597	76.167	4.841	1.00	14.32	A
	ATOM	3795	OD1	ASP	A	485	45.547	75.015	5.317	1.00	13.49	A
	ATOM	3796	OD2	ASP	A	485	46.636	76.861	4.858	1.00	15.48	A
55	ATOM	3797	C	ASP	A	485	44.987	76.189	1.870	1.00	12.92	A
	ATOM	3798	O	ASP	A	485	46.162	75.995	1.549	1.00	12.22	A
	ATOM	3799	N	TYR	A	486	43.990	75.426	1.428	1.00	12.46	A
	ATOM	3800	CA	TYR	A	486	44.247	74.312	0.512	1.00	11.89	A
	ATOM	3801	CB	TYR	A	486	42.949	73.574	0.173	1.00	12.04	A

5	ATOM	3857	N	GLU	A	492	52.081	76.022	-3.519	1.00	15.54	A
	ATOM	3858	CA	GLU	A	492	53.451	75.730	-3.121	1.00	16.41	A
	ATOM	3859	CB	GLU	A	492	53.551	75.675	-1.593	1.00	18.54	A
	ATOM	3860	CG	GLU	A	492	52.990	76.922	-0.915	1.00	23.76	A
	ATOM	3861	CD	GLU	A	492	52.969	76.825	0.600	1.00	26.74	A
10	ATOM	3862	OE1	GLU	A	492	52.527	75.783	1.134	1.00	28.59	A
	ATOM	3863	OE2	GLU	A	492	53.380	77.801	1.261	1.00	30.17	A
	ATOM	3864	C	GLU	A	492	53.875	74.395	-3.733	1.00	15.06	A
	ATOM	3865	O	GLU	A	492	55.023	74.225	-4.143	1.00	15.14	A
	ATOM	3866	N	ALA	A	493	52.940	73.451	-3.797	1.00	13.84	A
15	ATOM	3867	CA	ALA	A	493	53.223	72.137	-4.374	1.00	12.38	A
	ATOM	3868	CB	ALA	A	493	52.017	71.213	-4.194	1.00	11.33	A
	ATOM	3869	C	ALA	A	493	53.555	72.290	-5.859	1.00	12.51	A
	ATOM	3870	O	ALA	A	493	54.492	71.665	-6.366	1.00	11.30	A
	ATOM	3871	N	LEU	A	494	52.783	73.118	-6.558	1.00	12.26	A
20	ATOM	3872	CA	LEU	A	494	53.024	73.341	-7.981	1.00	13.51	A
	ATOM	3873	CB	LEU	A	494	51.970	74.295	-8.563	1.00	13.59	A
	ATOM	3874	CG	LEU	A	494	50.574	73.687	-8.745	1.00	14.46	A
	ATOM	3875	CD1	LEU	A	494	49.568	74.768	-9.146	1.00	14.29	A
	ATOM	3876	CD2	LEU	A	494	50.643	72.602	-9.807	1.00	14.76	A
25	ATOM	3877	C	LEU	A	494	54.425	73.904	-8.202	1.00	13.48	A
	ATOM	3878	O	LEU	A	494	55.142	73.456	-9.093	1.00	13.66	A
	ATOM	3879	N	LYS	A	495	54.813	74.875	-7.379	1.00	14.20	A
	ATOM	3880	CA	LYS	A	495	56.135	75.488	-7.483	1.00	14.70	A
	ATOM	3881	CB	LYS	A	495	56.254	76.665	-6.507	1.00	17.34	A
30	ATOM	3882	CG	LYS	A	495	55.285	77.807	-6.813	1.00	20.77	A
	ATOM	3883	CD	LYS	A	495	55.564	79.047	-5.969	1.00	23.82	A
	ATOM	3884	CE	LYS	A	495	55.371	78.781	-4.484	1.00	25.78	A
	ATOM	3885	NZ	LYS	A	495	55.661	79.995	-3.662	1.00	28.04	A
	ATOM	3886	C	LYS	A	495	57.222	74.454	-7.197	1.00	14.05	A
35	ATOM	3887	O	LYS	A	495	58.270	74.449	-7.847	1.00	12.58	A
	ATOM	3888	N	ALA	A	496	56.966	73.578	-6.228	1.00	12.65	A
	ATOM	3889	CA	ALA	A	496	57.918	72.528	-5.884	1.00	12.33	A
	ATOM	3890	CB	ALA	A	496	57.411	71.729	-4.687	1.00	12.48	A
	ATOM	3891	C	ALA	A	496	58.099	71.606	-7.089	1.00	12.17	A
40	ATOM	3892	O	ALA	A	496	59.220	71.230	-7.437	1.00	11.21	A
	ATOM	3893	N	CYS	A	497	56.988	71.232	-7.717	1.00	11.95	A
	ATOM	3894	CA	CYS	A	497	57.039	70.362	-8.885	1.00	11.78	A
	ATOM	3895	CB	CYS	A	497	55.621	70.008	-9.358	1.00	11.55	A
	ATOM	3896	SG	CYS	A	497	54.771	68.821	-8.280	1.00	11.22	A
45	ATOM	3897	C	CYS	A	497	57.816	71.034	-10.011	1.00	11.98	A
	ATOM	3898	O	CYS	A	497	58.656	70.404	-10.650	1.00	11.59	A
	ATOM	3899	N	GLN	A	498	57.546	72.314	-10.250	1.00	12.50	A
	ATOM	3900	CA	GLN	A	498	58.255	73.035	-11.305	1.00	13.65	A
	ATOM	3901	CB	GLN	A	498	57.775	74.488	-11.393	1.00	15.53	A
50	ATOM	3902	CG	GLN	A	498	58.581	75.330	-12.375	1.00	18.75	A
	ATOM	3903	CD	GLN	A	498	58.080	76.760	-12.484	1.00	20.66	A
	ATOM	3904	OE1	GLN	A	498	57.903	77.448	-11.472	1.00	23.47	A
	ATOM	3905	NE2	GLN	A	498	57.861	77.220	-13.712	1.00	19.47	A
	ATOM	3906	C	GLN	A	498	59.762	73.015	-11.054	1.00	13.54	A
55	ATOM	3907	O	GLN	A	498	60.543	72.759	-11.969	1.00	13.09	A
	ATOM	3908	N	MET	A	499	60.172	73.291	-9.819	1.00	12.68	A
	ATOM	3909	CA	MET	A	499	61.597	73.298	-9.482	1.00	13.24	A
	ATOM	3910	CB	MET	A	499	61.786	73.636	-7.998	1.00	14.75	A
	ATOM	3911	CG	MET	A	499	63.220	73.501	-7.483	1.00	17.49	A

5	ATOM	3912	SD	MET	A	499	64.441	74.502	-8.381	1.00	21.74	A
	ATOM	3913	CE	MET	A	499	64.082	76.122	-7.740	1.00	19.60	A
	ATOM	3914	C	MET	A	499	62.250	71.950	-9.798	1.00	12.44	A
	ATOM	3915	O	MET	A	499	63.302	71.892	-10.430	1.00	11.75	A
	ATOM	3916	N	VAL	A	500	61.621	70.867	-9.352	1.00	11.57	A
10	ATOM	3917	CA	VAL	A	500	62.153	69.530	-9.593	1.00	11.09	A
	ATOM	3918	CB	VAL	A	500	61.322	68.468	-8.837	1.00	10.85	A
	ATOM	3919	CG1	VAL	A	500	61.748	67.067	-9.247	1.00	10.52	A
	ATOM	3920	CG2	VAL	A	500	61.508	68.651	-7.331	1.00	11.06	A
	ATOM	3921	C	VAL	A	500	62.168	69.200	-11.083	1.00	11.35	A
15	ATOM	3922	O	VAL	A	500	63.152	68.680	-11.606	1.00	11.29	A
	ATOM	3923	N	MET	A	501	61.074	69.510	-11.766	1.00	11.53	A
	ATOM	3924	CA	MET	A	501	60.976	69.232	-13.192	1.00	11.54	A
	ATOM	3925	CB	MET	A	501	59.585	69.617	-13.702	1.00	12.75	A
	ATOM	3926	CG	MET	A	501	58.476	68.705	-13.199	1.00	13.12	A
20	ATOM	3927	SD	MET	A	501	56.834	69.365	-13.536	1.00	17.72	A
	ATOM	3928	CE	MET	A	501	56.676	69.003	-15.257	1.00	16.00	A
	ATOM	3929	C	MET	A	501	62.048	69.951	-14.006	1.00	12.05	A
	ATOM	3930	O	MET	A	501	62.744	69.323	-14.809	1.00	12.43	A
	ATOM	3931	N	GLN	A	502	62.189	71.259	-13.798	1.00	11.82	A
25	ATOM	3932	CA	GLN	A	502	63.172	72.032	-14.553	1.00	12.11	A
	ATOM	3933	CB	GLN	A	502	62.967	73.534	-14.315	1.00	12.25	A
	ATOM	3934	CG	GLN	A	502	63.209	74.023	-12.898	1.00	12.56	A
	ATOM	3935	CD	GLN	A	502	64.600	74.614	-12.725	1.00	13.84	A
	ATOM	3936	OE1	GLN	A	502	65.350	74.757	-13.696	1.00	13.40	A
30	ATOM	3937	NE2	GLN	A	502	64.944	74.972	-11.492	1.00	13.18	A
	ATOM	3938	C	GLN	A	502	64.612	71.609	-14.252	1.00	12.59	A
	ATOM	3939	O	GLN	A	502	65.449	71.571	-15.158	1.00	11.57	A
	ATOM	3940	N	GLN	A	503	64.906	71.286	-12.995	1.00	12.09	A
	ATOM	3941	CA	GLN	A	503	66.254	70.824	-12.651	1.00	13.27	A
35	ATOM	3942	CB	GLN	A	503	66.392	70.592	-11.142	1.00	13.43	A
	ATOM	3943	CG	GLN	A	503	66.600	71.849	-10.299	1.00	15.82	A
	ATOM	3944	CD	GLN	A	503	67.951	72.502	-10.544	1.00	16.04	A
	ATOM	3945	OE1	GLN	A	503	68.944	71.820	-10.810	1.00	16.22	A
	ATOM	3946	NE2	GLN	A	503	67.998	73.825	-10.437	1.00	17.27	A
40	ATOM	3947	C	GLN	A	503	66.512	69.504	-13.381	1.00	12.92	A
	ATOM	3948	O	GLN	A	503	67.598	69.276	-13.911	1.00	13.19	A
	ATOM	3949	N	SER	A	504	65.505	68.632	-13.401	1.00	12.21	A
	ATOM	3950	CA	SER	A	504	65.629	67.338	-14.070	1.00	12.69	A
	ATOM	3951	CB	SER	A	504	64.376	66.487	-13.833	1.00	12.53	A
45	ATOM	3952	OG	SER	A	504	64.240	66.150	-12.464	1.00	13.33	A
	ATOM	3953	C	SER	A	504	65.860	67.487	-15.570	1.00	12.34	A
	ATOM	3954	O	SER	A	504	66.719	66.814	-16.143	1.00	12.28	A
	ATOM	3955	N	VAL	A	505	65.091	68.363	-16.207	1.00	12.19	A
	ATOM	3956	CA	VAL	A	505	65.237	68.577	-17.644	1.00	12.76	A
50	ATOM	3957	CB	VAL	A	505	64.228	69.624	-18.166	1.00	12.70	A
	ATOM	3958	CG1	VAL	A	505	64.573	70.019	-19.607	1.00	12.02	A
	ATOM	3959	CG2	VAL	A	505	62.811	69.051	-18.108	1.00	12.78	A
	ATOM	3960	C	VAL	A	505	66.651	69.043	-17.973	1.00	13.11	A
	ATOM	3961	O	VAL	A	505	67.276	68.554	-18.915	1.00	13.42	A
55	ATOM	3962	N	TYR	A	506	67.161	69.983	-17.188	1.00	13.48	A
	ATOM	3963	CA	TYR	A	506	68.503	70.496	-17.423	1.00	14.99	A
	ATOM	3964	CB	TYR	A	506	68.825	71.593	-16.406	1.00	16.52	A
	ATOM	3965	CG	TYR	A	506	70.166	72.239	-16.635	1.00	18.96	A
	ATOM	3966	CD1	TYR	A	506	70.475	72.822	-17.865	1.00	20.22	A

5	ATOM	3967	CE1	TYR	A	506	71.722	73.393	-18.098	1.00	22.60	A
	ATOM	3968	CD2	TYR	A	506	71.139	72.244	-15.638	1.00	19.62	A
	ATOM	3969	CE2	TYR	A	506	72.394	72.811	-15.864	1.00	22.32	A
	ATOM	3970	CZ	TYR	A	506	72.674	73.380	-17.097	1.00	22.77	A
	ATOM	3971	OH	TYR	A	506	73.914	73.929	-17.337	1.00	27.54	A
10	ATOM	3972	C	TYR	A	506	69.561	69.385	-17.359	1.00	14.96	A
	ATOM	3973	O	TYR	A	506	70.468	69.325	-18.195	1.00	14.30	A
	ATOM	3974	N	ARG	A	507	69.435	68.499	-16.377	1.00	14.25	A
	ATOM	3975	CA	ARG	A	507	70.384	67.399	-16.214	1.00	14.23	A
	ATOM	3976	CB	ARG	A	507	70.197	66.751	-14.837	1.00	14.62	A
15	ATOM	3977	CG	ARG	A	507	71.238	65.694	-14.492	1.00	15.49	A
	ATOM	3978	CD	ARG	A	507	71.041	65.175	-13.075	1.00	16.94	A
	ATOM	3979	NE	ARG	A	507	72.055	64.190	-12.707	1.00	18.67	A
	ATOM	3980	CZ	ARG	A	507	72.170	63.649	-11.497	1.00	18.55	A
	ATOM	3981	NH1	ARG	A	507	71.333	63.996	-10.527	1.00	18.82	A
20	ATOM	3982	NH2	ARG	A	507	73.122	62.758	-11.256	1.00	19.58	A
	ATOM	3983	C	ARG	A	507	70.247	66.334	-17.310	1.00	13.93	A
	ATOM	3984	O	ARG	A	507	71.241	65.776	-17.776	1.00	12.93	A
	ATOM	3985	N	LEU	A	508	69.016	66.062	-17.723	1.00	13.04	A
	ATOM	3986	CA	LEU	A	508	68.758	65.059	-18.752	1.00	13.40	A
25	ATOM	3987	CB	LEU	A	508	67.274	64.669	-18.738	1.00	12.96	A
	ATOM	3988	CG	LEU	A	508	66.779	63.783	-17.588	1.00	12.57	A
	ATOM	3989	CD1	LEU	A	508	65.251	63.836	-17.521	1.00	12.21	A
	ATOM	3990	CD2	LEU	A	508	67.264	62.354	-17.793	1.00	12.51	A
	ATOM	3991	C	LEU	A	508	69.139	65.486	-20.171	1.00	13.63	A
30	ATOM	3992	O	LEU	A	508	69.386	64.637	-21.031	1.00	13.67	A
	ATOM	3993	N	LEU	A	509	69.188	66.790	-20.422	1.00	13.58	A
	ATOM	3994	CA	LEU	A	509	69.494	67.278	-21.763	1.00	13.53	A
	ATOM	3995	CB	LEU	A	509	68.302	68.073	-22.303	1.00	12.65	A
	ATOM	3996	CG	LEU	A	509	67.030	67.266	-22.577	1.00	12.79	A
35	ATOM	3997	CD1	LEU	A	509	65.914	68.205	-23.012	1.00	11.70	A
	ATOM	3998	CD2	LEU	A	509	67.301	66.222	-23.657	1.00	12.41	A
	ATOM	3999	C	LEU	A	509	70.766	68.107	-21.916	1.00	14.29	A
	ATOM	4000	O	LEU	A	509	70.915	68.837	-22.900	1.00	14.16	A
	ATOM	4001	N	THR	A	510	71.680	67.992	-20.957	1.00	14.27	A
40	ATOM	4002	CA	THR	A	510	72.938	68.731	-21.015	1.00	14.89	A
	ATOM	4003	CB	THR	A	510	73.083	69.678	-19.803	1.00	14.99	A
	ATOM	4004	OG1	THR	A	510	71.994	70.609	-19.796	1.00	13.54	A
	ATOM	4005	CG2	THR	A	510	74.400	70.455	-19.872	1.00	15.03	A
	ATOM	4006	C	THR	A	510	74.100	67.744	-21.022	1.00	15.57	A
45	ATOM	4007	O	THR	A	510	74.106	66.784	-20.252	1.00	14.99	A
	ATOM	4008	N	LYS	A	511	75.075	67.967	-21.900	1.00	16.82	A
	ATOM	4009	CA	LYS	A	511	76.234	67.075	-21.972	1.00	18.12	A
	ATOM	4010	CB	LYS	A	511	77.309	67.650	-22.902	1.00	19.84	A
	ATOM	4011	CG	LYS	A	511	78.515	66.740	-23.058	1.00	22.03	A
50	ATOM	4012	CD	LYS	A	511	79.563	67.323	-23.988	1.00	24.78	A
	ATOM	4013	CE	LYS	A	511	80.759	66.385	-24.094	1.00	26.41	A
	ATOM	4014	NZ	LYS	A	511	81.834	66.924	-24.969	1.00	28.84	A
	ATOM	4015	C	LYS	A	511	76.789	66.911	-20.564	1.00	17.91	A
	ATOM	4016	O	LYS	A	511	77.076	67.895	-19.879	1.00	17.65	A
55	ATOM	4017	N	PRO	A	512	76.943	65.658	-20.110	1.00	18.35	A
	ATOM	4018	CD	PRO	A	512	76.675	64.422	-20.868	1.00	18.80	A
	ATOM	4019	CA	PRO	A	512	77.455	65.343	-18.773	1.00	18.48	A
	ATOM	4020	CB	PRO	A	512	77.711	63.840	-18.854	1.00	19.18	A
	ATOM	4021	CG	PRO	A	512	76.629	63.379	-19.773	1.00	19.70	A

5	ATOM	4022	C	PRO	A	512	78.685	66.118	-18.299	1.00	18.38	A
	ATOM	4023	O	PRO	A	512	78.698	66.633	-17.182	1.00	18.96	A
	ATOM	4024	N	SER	A	513	79.714	66.199	-19.137	1.00	19.08	A
	ATOM	4025	CA	SER	A	513	80.938	66.898	-18.754	1.00	18.72	A
	ATOM	4026	CB	SER	A	513	82.086	66.503	-19.694	1.00	19.04	A
10	ATOM	4027	OG	SER	A	513	81.770	66.768	-21.050	1.00	18.98	A
	ATOM	4028	C	SER	A	513	80.800	68.421	-18.701	1.00	18.92	A
	ATOM	4029	O	SER	A	513	81.720	69.113	-18.266	1.00	18.57	A
	ATOM	4030	N	ILE	A	514	79.651	68.933	-19.134	1.00	18.74	A
	ATOM	4031	CA	ILE	A	514	79.383	70.371	-19.131	1.00	19.04	A
15	ATOM	4032	CB	ILE	A	514	78.787	70.831	-20.495	1.00	20.04	A
	ATOM	4033	CG2	ILE	A	514	78.309	72.281	-20.407	1.00	21.10	A
	ATOM	4034	CG1	ILE	A	514	79.837	70.686	-21.598	1.00	21.00	A
	ATOM	4035	CD1	ILE	A	514	79.333	71.051	-22.983	1.00	22.47	A
	ATOM	4036	C	ILE	A	514	78.395	70.729	-18.016	1.00	18.79	A
20	ATOM	4037	O	ILE	A	514	78.419	71.838	-17.482	1.00	17.84	A
	ATOM	4038	N	TYR	A	515	77.531	69.778	-17.671	1.00	18.53	A
	ATOM	4039	CA	TYR	A	515	76.517	69.963	-16.629	1.00	18.27	A
	ATOM	4040	CB	TYR	A	515	75.828	68.619	-16.371	1.00	18.00	A
	ATOM	4041	CG	TYR	A	515	74.789	68.614	-15.277	1.00	17.16	A
25	ATOM	4042	CD1	TYR	A	515	73.637	69.398	-15.369	1.00	17.45	A
	ATOM	4043	CE1	TYR	A	515	72.658	69.359	-14.370	1.00	16.75	A
	ATOM	4044	CD2	TYR	A	515	74.940	67.793	-14.160	1.00	17.50	A
	ATOM	4045	CE2	TYR	A	515	73.977	67.746	-13.162	1.00	16.69	A
	ATOM	4046	CZ	TYR	A	515	72.838	68.529	-13.270	1.00	17.17	A
30	ATOM	4047	OH	TYR	A	515	71.886	68.473	-12.276	1.00	17.04	A
	ATOM	4048	C	TYR	A	515	77.102	70.529	-15.330	1.00	18.11	A
	ATOM	4049	O	TYR	A	515	77.924	69.890	-14.674	1.00	18.22	A
	ATOM	4050	N	SER	A	516	76.671	71.737	-14.966	1.00	18.53	A
	ATOM	4051	CA	SER	A	516	77.146	72.414	-13.753	1.00	18.57	A
35	ATOM	4052	CB	SER	A	516	78.162	73.496	-14.129	1.00	18.96	A
	ATOM	4053	OG	SER	A	516	78.760	74.063	-12.977	1.00	20.03	A
	ATOM	4054	C	SER	A	516	75.936	73.047	-13.066	1.00	19.08	A
	ATOM	4055	O	SER	A	516	75.689	74.249	-13.189	1.00	18.41	A
	ATOM	4056	N	PRO	A	517	75.174	72.240	-12.314	1.00	19.04	A
40	ATOM	4057	CD	PRO	A	517	75.364	70.793	-12.109	1.00	19.14	A
	ATOM	4058	CA	PRO	A	517	73.977	72.703	-11.615	1.00	19.54	A
	ATOM	4059	CB	PRO	A	517	73.238	71.402	-11.327	1.00	19.43	A
	ATOM	4060	CG	PRO	A	517	74.366	70.484	-10.998	1.00	19.51	A
	ATOM	4061	C	PRO	A	517	74.075	73.562	-10.364	1.00	19.76	A
45	ATOM	4062	O	PRO	A	517	74.933	73.362	-9.506	1.00	20.43	A
	ATOM	4063	N	ASP	A	518	73.160	74.523	-10.296	1.00	20.28	A
	ATOM	4064	CA	ASP	A	518	72.983	75.411	-9.157	1.00	20.46	A
	ATOM	4065	CB	ASP	A	518	72.984	76.879	-9.579	1.00	21.58	A
	ATOM	4066	CG	ASP	A	518	72.662	77.813	-8.424	1.00	22.93	A
50	ATOM	4067	OD1	ASP	A	518	72.006	77.366	-7.456	1.00	22.28	A
	ATOM	4068	OD2	ASP	A	518	73.048	78.999	-8.487	1.00	24.17	A
	ATOM	4069	C	ASP	A	518	71.562	74.998	-8.784	1.00	20.16	A
	ATOM	4070	O	ASP	A	518	70.602	75.422	-9.426	1.00	19.99	A
	ATOM	4071	N	PHE	A	519	71.435	74.159	-7.764	1.00	20.05	A
55	ATOM	4072	CA	PHE	A	519	70.136	73.642	-7.354	1.00	19.70	A
	ATOM	4073	CB	PHE	A	519	70.331	72.607	-6.247	1.00	19.92	A
	ATOM	4074	CG	PHE	A	519	71.195	71.445	-6.662	1.00	20.35	A
	ATOM	4075	CD1	PHE	A	519	70.936	70.760	-7.848	1.00	20.35	A
	ATOM	4076	CD2	PHE	A	519	72.275	71.046	-5.882	1.00	20.06	A

5	ATOM	4077	CE1	PHE	A	519	71.741	69.694	-8.253	1.00	20.49	A
	ATOM	4078	CE2	PHE	A	519	73.085	69.983	-6.276	1.00	20.68	A
	ATOM	4079	CZ	PHE	A	519	72.818	69.306	-7.464	1.00	20.65	A
	ATOM	4080	C	PHE	A	519	69.073	74.656	-6.949	1.00	19.92	A
	ATOM	4081	O	PHE	A	519	67.926	74.283	-6.703	1.00	19.71	A
10	ATOM	4082	N	SER	A	520	69.438	75.932	-6.901	1.00	20.32	A
	ATOM	4083	CA	SER	A	520	68.482	76.974	-6.534	1.00	20.88	A
	ATOM	4084	CB	SER	A	520	69.072	77.879	-5.452	1.00	21.33	A
	ATOM	4085	OG	SER	A	520	70.122	78.674	-5.981	1.00	22.27	A
	ATOM	4086	C	SER	A	520	68.136	77.826	-7.753	1.00	21.21	A
15	ATOM	4087	O	SER	A	520	67.272	78.700	-7.687	1.00	20.94	A
	ATOM	4088	N	PHE	A	521	68.816	77.558	-8.862	1.00	20.71	A
	ATOM	4089	CA	PHE	A	521	68.625	78.310	-10.096	1.00	20.88	A
	ATOM	4090	CB	PHE	A	521	69.932	78.310	-10.897	1.00	22.15	A
	ATOM	4091	CG	PHE	A	521	69.950	79.292	-12.034	1.00	23.36	A
20	ATOM	4092	CD1	PHE	A	521	70.078	80.657	-11.787	1.00	24.36	A
	ATOM	4093	CD2	PHE	A	521	69.817	78.856	-13.349	1.00	23.34	A
	ATOM	4094	CE1	PHE	A	521	70.071	81.578	-12.837	1.00	24.48	A
	ATOM	4095	CE2	PHE	A	521	69.808	79.765	-14.405	1.00	23.79	A
	ATOM	4096	CZ	PHE	A	521	69.936	81.130	-14.149	1.00	24.57	A
25	ATOM	4097	C	PHE	A	521	67.497	77.768	-10.973	1.00	20.45	A
	ATOM	4098	O	PHE	A	521	67.238	76.567	-10.998	1.00	19.90	A
	ATOM	4099	N	SER	A	522	66.828	78.666	-11.693	1.00	20.31	A
	ATOM	4100	CA	SER	A	522	65.746	78.274	-12.588	1.00	19.82	A
	ATOM	4101	CB	SER	A	522	64.569	79.250	-12.474	1.00	20.87	A
30	ATOM	4102	OG	SER	A	522	63.902	79.102	-11.230	1.00	24.21	A
	ATOM	4103	C	SER	A	522	66.259	78.251	-14.023	1.00	18.66	A
	ATOM	4104	O	SER	A	522	66.316	79.286	-14.686	1.00	18.49	A
	ATOM	4105	N	TYR	A	523	66.643	77.070	-14.495	1.00	17.51	A
	ATOM	4106	CA	TYR	A	523	67.149	76.923	-15.854	1.00	16.64	A
35	ATOM	4107	CB	TYR	A	523	67.888	75.592	-16.013	1.00	17.45	A
	ATOM	4108	CG	TYR	A	523	69.163	75.529	-15.213	1.00	19.19	A
	ATOM	4109	CD1	TYR	A	523	69.191	74.941	-13.949	1.00	18.97	A
	ATOM	4110	CE1	TYR	A	523	70.363	74.934	-13.189	1.00	20.14	A
	ATOM	4111	CD2	TYR	A	523	70.338	76.106	-15.701	1.00	19.40	A
40	ATOM	4112	CE2	TYR	A	523	71.503	76.106	-14.954	1.00	19.85	A
	ATOM	4113	CZ	TYR	A	523	71.511	75.521	-13.700	1.00	20.28	A
	ATOM	4114	OH	TYR	A	523	72.669	75.540	-12.955	1.00	20.88	A
	ATOM	4115	C	TYR	A	523	66.023	77.002	-16.865	1.00	16.16	A
	ATOM	4116	O	TYR	A	523	66.225	77.440	-18.000	1.00	15.44	A
45	ATOM	4117	N	PHE	A	524	64.838	76.560	-16.452	1.00	15.23	A
	ATOM	4118	CA	PHE	A	524	63.664	76.601	-17.313	1.00	15.11	A
	ATOM	4119	CB	PHE	A	524	63.294	75.216	-17.852	1.00	14.27	A
	ATOM	4120	CG	PHE	A	524	64.335	74.590	-18.724	1.00	13.80	A
	ATOM	4121	CD1	PHE	A	524	65.403	73.897	-18.166	1.00	14.22	A
50	ATOM	4122	CD2	PHE	A	524	64.226	74.657	-20.112	1.00	13.29	A
	ATOM	4123	CE1	PHE	A	524	66.349	73.274	-18.977	1.00	14.06	A
	ATOM	4124	CE2	PHE	A	524	65.166	74.038	-20.932	1.00	12.89	A
	ATOM	4125	CZ	PHE	A	524	66.231	73.344	-20.360	1.00	13.48	A
	ATOM	4126	C	PHE	A	524	62.461	77.103	-16.537	1.00	15.93	A
55	ATOM	4127	O	PHE	A	524	62.394	76.980	-15.314	1.00	15.29	A
	ATOM	4128	N	THR	A	525	61.510	77.661	-17.274	1.00	16.53	A
	ATOM	4129	CA	THR	A	525	60.265	78.145	-16.708	1.00	18.21	A
	ATOM	4130	CB	THR	A	525	60.026	79.627	-17.050	1.00	18.69	A
	ATOM	4131	OG1	THR	A	525	61.031	80.431	-16.419	1.00	22.90	A

5	ATOM	4132	CG2	THR	A	525	58.659	80.072	-16.565	1.00	21.52	A
	ATOM	4133	C	THR	A	525	59.181	77.308	-17.376	1.00	17.50	A
	ATOM	4134	O	THR	A	525	59.190	77.147	-18.596	1.00	16.90	A
	ATOM	4135	N	LEU	A	526	58.265	76.757	-16.587	1.00	16.82	A
	ATOM	4136	CA	LEU	A	526	57.184	75.968	-17.159	1.00	17.40	A
10	ATOM	4137	CB	LEU	A	526	56.457	75.166	-16.072	1.00	18.26	A
	ATOM	4138	CG	LEU	A	526	57.000	73.796	-15.667	1.00	18.92	A
	ATOM	4139	CD1	LEU	A	526	56.213	73.271	-14.472	1.00	19.91	A
	ATOM	4140	CD2	LEU	A	526	56.887	72.833	-16.837	1.00	19.01	A
	ATOM	4141	C	LEU	A	526	56.184	76.904	-17.832	1.00	17.33	A
15	ATOM	4142	O	LEU	A	526	55.920	78.000	-17.335	1.00	17.26	A
	ATOM	4143	N	ASP	A	527	55.649	76.481	-18.971	1.00	16.38	A
	ATOM	4144	CA	ASP	A	527	54.651	77.271	-19.674	1.00	17.04	A
	ATOM	4145	CB	ASP	A	527	55.124	77.631	-21.085	1.00	17.59	A
	ATOM	4146	CG	ASP	A	527	54.133	78.520	-21.819	1.00	18.89	A
20	ATOM	4147	OD1	ASP	A	527	53.867	79.640	-21.329	1.00	18.47	A
	ATOM	4148	OD2	ASP	A	527	53.620	78.097	-22.879	1.00	18.66	A
	ATOM	4149	C	ASP	A	527	53.409	76.396	-19.751	1.00	16.37	A
	ATOM	4150	O	ASP	A	527	53.434	75.340	-20.375	1.00	17.71	A
	ATOM	4151	N	ASP	A	528	52.337	76.825	-19.094	1.00	16.05	A
25	ATOM	4152	CA	ASP	A	528	51.084	76.076	-19.078	1.00	14.81	A
	ATOM	4153	CB	ASP	A	528	50.703	75.718	-17.638	1.00	14.73	A
	ATOM	4154	CG	ASP	A	528	49.663	74.612	-17.561	1.00	14.72	A
	ATOM	4155	OD1	ASP	A	528	48.648	74.677	-18.288	1.00	13.92	A
	ATOM	4156	OD2	ASP	A	528	49.863	73.674	-16.763	1.00	15.10	A
30	ATOM	4157	C	ASP	A	528	50.009	76.963	-19.691	1.00	15.02	A
	ATOM	4158	O	ASP	A	528	49.667	78.009	-19.144	1.00	13.40	A
	ATOM	4159	N	SER	A	529	49.471	76.546	-20.829	1.00	15.55	A
	ATOM	4160	CA	SER	A	529	48.462	77.355	-21.494	1.00	17.05	A
	ATOM	4161	CB	SER	A	529	48.464	77.064	-22.998	1.00	18.24	A
35	ATOM	4162	OG	SER	A	529	47.861	75.815	-23.262	1.00	23.59	A
	ATOM	4163	C	SER	A	529	47.055	77.159	-20.938	1.00	16.64	A
	ATOM	4164	O	SER	A	529	46.149	77.913	-21.283	1.00	16.93	A
	ATOM	4165	N	ARG	A	530	46.866	76.169	-20.070	1.00	15.67	A
	ATOM	4166	CA	ARG	A	530	45.533	75.927	-19.535	1.00	16.21	A
40	ATOM	4167	CB	ARG	A	530	45.033	74.562	-20.015	1.00	15.39	A
	ATOM	4168	CG	ARG	A	530	44.928	74.520	-21.531	1.00	15.38	A
	ATOM	4169	CD	ARG	A	530	44.291	73.247	-22.059	1.00	15.32	A
	ATOM	4170	NE	ARG	A	530	45.035	72.053	-21.673	1.00	15.99	A
	ATOM	4171	CZ	ARG	A	530	44.808	70.845	-22.178	1.00	17.04	A
45	ATOM	4172	NH1	ARG	A	530	43.858	70.681	-23.091	1.00	16.99	A
	ATOM	4173	NH2	ARG	A	530	45.524	69.802	-21.771	1.00	16.09	A
	ATOM	4174	C	ARG	A	530	45.349	76.075	-18.029	1.00	16.59	A
	ATOM	4175	O	ARG	A	530	44.277	75.781	-17.501	1.00	16.64	A
	ATOM	4176	N	TRP	A	531	46.388	76.529	-17.337	1.00	15.99	A
50	ATOM	4177	CA	TRP	A	531	46.277	76.760	-15.900	1.00	17.02	A
	ATOM	4178	CB	TRP	A	531	46.519	75.489	-15.085	1.00	16.79	A
	ATOM	4179	CG	TRP	A	531	46.420	75.776	-13.618	1.00	18.61	A
	ATOM	4180	CD2	TRP	A	531	45.218	75.854	-12.845	1.00	18.70	A
	ATOM	4181	CE2	TRP	A	531	45.583	76.258	-11.540	1.00	19.61	A
55	ATOM	4182	CE3	TRP	A	531	43.866	75.625	-13.127	1.00	19.31	A
	ATOM	4183	CD1	TRP	A	531	47.440	76.124	-12.773	1.00	18.69	A
	ATOM	4184	NE1	TRP	A	531	46.944	76.416	-11.523	1.00	19.66	A
	ATOM	4185	CZ2	TRP	A	531	44.642	76.438	-10.520	1.00	20.36	A
	ATOM	4186	CZ3	TRP	A	531	42.928	75.806	-12.111	1.00	19.92	A

5	ATOM	4187	CH2	TRP	A	531	43.323	76.207	-10.825	1.00	20.15	A
	ATOM	4188	C	TRP	A	531	47.247	77.833	-15.433	1.00	17.11	A
	ATOM	4189	O	TRP	A	531	48.445	77.745	-15.691	1.00	16.78	A
	ATOM	4190	N	PRO	A	532	46.740	78.855	-14.724	1.00	18.18	A
	ATOM	4191	CD	PRO	A	532	47.581	79.813	-13.986	1.00	19.11	A
10	ATOM	4192	CA	PRO	A	532	45.327	79.028	-14.362	1.00	19.02	A
	ATOM	4193	CB	PRO	A	532	45.353	80.248	-13.441	1.00	19.35	A
	ATOM	4194	CG	PRO	A	532	46.705	80.142	-12.795	1.00	19.62	A
	ATOM	4195	C	PRO	A	532	44.421	79.230	-15.572	1.00	20.08	A
	ATOM	4196	O	PRO	A	532	43.202	79.077	-15.479	1.00	19.73	A
15	ATOM	4197	N	GLY	A	533	45.024	79.574	-16.705	1.00	20.53	A
	ATOM	4198	CA	GLY	A	533	44.257	79.769	-17.920	1.00	22.81	A
	ATOM	4199	C	GLY	A	533	44.068	81.218	-18.320	1.00	24.62	A
	ATOM	4200	O	GLY	A	533	44.043	82.113	-17.472	1.00	24.61	A
	ATOM	4201	N	SER	A	534	43.938	81.447	-19.624	1.00	26.45	A
20	ATOM	4202	CA	SER	A	534	43.739	82.791	-20.153	1.00	27.99	A
	ATOM	4203	CB	SER	A	534	43.665	82.746	-21.682	1.00	29.27	A
	ATOM	4204	OG	SER	A	534	43.340	84.017	-22.215	1.00	31.07	A
	ATOM	4205	C	SER	A	534	42.446	83.369	-19.588	1.00	28.53	A
	ATOM	4206	O	SER	A	534	41.402	82.714	-19.617	1.00	28.85	A
25	ATOM	4207	N	GLY	A	535	42.518	84.592	-19.072	1.00	29.09	A
	ATOM	4208	CA	GLY	A	535	41.340	85.221	-18.504	1.00	29.80	A
	ATOM	4209	C	GLY	A	535	41.207	84.931	-17.019	1.00	30.59	A
	ATOM	4210	O	GLY	A	535	40.349	85.496	-16.338	1.00	30.53	A
	ATOM	4211	N	VAL	A	536	42.055	84.041	-16.516	1.00	31.00	A
30	ATOM	4212	CA	VAL	A	536	42.038	83.680	-15.104	1.00	31.98	A
	ATOM	4213	CB	VAL	A	536	42.135	82.145	-14.918	1.00	32.31	A
	ATOM	4214	CG1	VAL	A	536	42.095	81.791	-13.439	1.00	31.89	A
	ATOM	4215	CG2	VAL	A	536	40.997	81.459	-15.658	1.00	31.94	A
	ATOM	4216	C	VAL	A	536	43.218	84.343	-14.400	1.00	32.83	A
35	ATOM	4217	O	VAL	A	536	43.080	84.894	-13.307	1.00	32.38	A
	ATOM	4218	N	GLU	A	537	44.378	84.295	-15.045	1.00	33.97	A
	ATOM	4219	CA	GLU	A	537	45.592	84.881	-14.495	1.00	35.29	A
	ATOM	4220	CB	GLU	A	537	46.085	84.034	-13.313	1.00	36.13	A
	ATOM	4221	CG	GLU	A	537	47.534	84.273	-12.900	1.00	37.68	A
40	ATOM	4222	CD	GLU	A	537	47.933	83.477	-11.663	1.00	38.87	A
	ATOM	4223	OE1	GLU	A	537	49.149	83.273	-11.450	1.00	39.08	A
	ATOM	4224	OE2	GLU	A	537	47.035	83.062	-10.898	1.00	39.11	A
	ATOM	4225	C	GLU	A	537	46.676	84.973	-15.566	1.00	35.63	A
	ATOM	4226	O	GLU	A	537	47.086	83.959	-16.131	1.00	35.88	A
45	ATOM	4227	N	ASP	A	538	47.127	86.190	-15.860	1.00	35.94	A
	ATOM	4228	CA	ASP	A	538	48.183	86.371	-16.853	1.00	35.97	A
	ATOM	4229	CB	ASP	A	538	48.244	87.830	-17.318	1.00	37.57	A
	ATOM	4230	CG	ASP	A	538	49.235	88.037	-18.452	1.00	39.01	A
	ATOM	4231	OD1	ASP	A	538	49.150	87.297	-19.456	1.00	39.65	A
50	ATOM	4232	OD2	ASP	A	538	50.094	88.938	-18.344	1.00	40.23	A
	ATOM	4233	C	ASP	A	538	49.477	85.981	-16.154	1.00	35.09	A
	ATOM	4234	O	ASP	A	538	50.132	86.812	-15.524	1.00	35.01	A
	ATOM	4235	N	SER	A	539	49.835	84.705	-16.263	1.00	34.01	A
	ATOM	4236	CA	SER	A	539	51.026	84.186	-15.603	1.00	32.93	A
55	ATOM	4237	CB	SER	A	539	50.633	83.024	-14.689	1.00	32.75	A
	ATOM	4238	OG	SER	A	539	50.056	81.969	-15.443	1.00	33.31	A
	ATOM	4239	C	SER	A	539	52.145	83.722	-16.525	1.00	31.91	A
	ATOM	4240	O	SER	A	539	53.321	83.848	-16.184	1.00	32.02	A
	ATOM	4241	N	ARG	A	540	51.792	83.173	-17.683	1.00	30.71	A

5	ATOM	4242	CA	ARG	A	540	52.816	82.685	-18.596	1.00	29.23	A
	ATOM	4243	CB	ARG	A	540	52.187	81.838	-19.708	1.00	29.16	A
	ATOM	4244	CG	ARG	A	540	50.939	82.406	-20.335	1.00	27.91	A
	ATOM	4245	CD	ARG	A	540	50.191	81.319	-21.111	1.00	26.65	A
	ATOM	4246	NE	ARG	A	540	51.057	80.605	-22.049	1.00	23.55	A
	ATOM	4247	CZ	ARG	A	540	50.631	80.056	-23.182	1.00	23.62	A
	ATOM	4248	NH1	ARG	A	540	49.350	80.140	-23.520	1.00	21.80	A
10	ATOM	4249	NH2	ARG	A	540	51.482	79.431	-23.983	1.00	22.12	A
	ATOM	4250	C	ARG	A	540	53.686	83.795	-19.170	1.00	28.47	A
	ATOM	4251	O	ARG	A	540	53.212	84.887	-19.490	1.00	28.48	A
	ATOM	4252	N	THR	A	541	54.974	83.499	-19.278	1.00	26.89	A
15	ATOM	4253	CA	THR	A	541	55.951	84.452	-19.773	1.00	25.79	A
	ATOM	4254	CB	THR	A	541	57.370	84.068	-19.319	1.00	26.95	A
	ATOM	4255	OG1	THR	A	541	57.856	83.001	-20.142	1.00	28.25	A
	ATOM	4256	CG2	THR	A	541	57.362	83.600	-17.870	1.00	26.32	A
	ATOM	4257	C	THR	A	541	55.969	84.547	-21.288	1.00	24.23	A
20	ATOM	4258	O	THR	A	541	55.591	83.609	-21.991	1.00	24.17	A
	ATOM	4259	N	THR	A	542	56.411	85.697	-21.784	1.00	22.20	A
	ATOM	4260	CA	THR	A	542	56.523	85.917	-23.214	1.00	19.97	A
	ATOM	4261	CB	THR	A	542	56.167	87.371	-23.609	1.00	20.43	A
	ATOM	4262	OG1	THR	A	542	54.789	87.630	-23.320	1.00	19.24	A
	ATOM	4263	CG2	THR	A	542	56.419	87.594	-25.098	1.00	19.35	A
	ATOM	4264	C	THR	A	542	57.978	85.679	-23.581	1.00	19.20	A
25	ATOM	4265	O	THR	A	542	58.884	86.149	-22.889	1.00	18.80	A
	ATOM	4266	N	ILE	A	543	58.207	84.921	-24.644	1.00	17.47	A
	ATOM	4267	CA	ILE	A	543	59.567	84.688	-25.097	1.00	17.03	A
	ATOM	4268	CB	ILE	A	543	59.649	83.461	-26.023	1.00	16.71	A
30	ATOM	4269	CG2	ILE	A	543	61.033	83.373	-26.666	1.00	16.10	A
	ATOM	4270	CG1	ILE	A	543	59.335	82.194	-25.215	1.00	16.14	A
	ATOM	4271	CD1	ILE	A	543	59.378	80.913	-26.021	1.00	15.87	A
	ATOM	4272	C	ILE	A	543	59.899	85.962	-25.869	1.00	17.36	A
	ATOM	4273	O	ILE	A	543	59.317	86.225	-26.923	1.00	16.63	A
35	ATOM	4274	N	ILE	A	544	60.808	86.763	-25.319	1.00	17.34	A
	ATOM	4275	CA	ILE	A	544	61.189	88.025	-25.935	1.00	17.68	A
	ATOM	4276	CB	ILE	A	544	61.452	89.098	-24.854	1.00	18.33	A
	ATOM	4277	CG2	ILE	A	544	61.827	90.424	-25.504	1.00	18.51	A
	ATOM	4278	CG1	ILE	A	544	60.192	89.275	-24.000	1.00	19.26	A
40	ATOM	4279	CD1	ILE	A	544	60.307	90.343	-22.934	1.00	21.06	A
	ATOM	4280	C	ILE	A	544	62.412	87.877	-26.832	1.00	17.90	A
	ATOM	4281	O	ILE	A	544	63.518	87.601	-26.367	1.00	17.14	A
	ATOM	4282	N	LEU	A	545	62.191	88.053	-28.129	1.00	17.81	A
	ATOM	4283	CA	LEU	A	545	63.253	87.941	-29.118	1.00	18.43	A
45	ATOM	4284	CB	LEU	A	545	62.913	86.836	-30.120	1.00	17.98	A
	ATOM	4285	CG	LEU	A	545	62.603	85.454	-29.530	1.00	17.86	A
	ATOM	4286	CD1	LEU	A	545	62.153	84.516	-30.640	1.00	17.14	A
	ATOM	4287	CD2	LEU	A	545	63.837	84.901	-28.819	1.00	17.14	A
	ATOM	4288	C	LEU	A	545	63.412	89.274	-29.847	1.00	19.23	A
50	ATOM	4289	O	LEU	A	545	62.471	90.059	-29.926	1.00	18.84	A
	ATOM	4290	N	GLY	A	546	64.607	89.526	-30.372	1.00	19.77	A
	ATOM	4291	CA	GLY	A	546	64.851	90.766	-31.087	1.00	20.96	A
	ATOM	4292	C	GLY	A	546	66.276	90.848	-31.598	1.00	21.61	A
	ATOM	4293	O	GLY	A	546	67.199	90.368	-30.949	1.00	20.57	A
55	ATOM	4294	N	GLU	A	547	66.456	91.463	-32.761	1.00	23.26	A
	ATOM	4295	CA	GLU	A	547	67.780	91.599	-33.361	1.00	25.04	A
	ATOM	4296	CB	GLU	A	547	67.702	92.459	-34.624	1.00	27.57	A

5	ATOM	4297	CG	GLU	A	547	66.673	92.001	-35.642	1.00	31.94	A
	ATOM	4298	CD	GLU	A	547	66.538	92.977	-36.800	1.00	34.18	A
	ATOM	4299	OE1	GLU	A	547	67.521	93.141	-37.558	1.00	35.72	A
	ATOM	4300	OE2	GLU	A	547	65.452	93.584	-36.946	1.00	35.67	A
	ATOM	4301	C	GLU	A	547	68.771	92.241	-32.397	1.00	24.63	A
10	ATOM	4302	O	GLU	A	547	69.950	91.886	-32.372	1.00	24.67	A
	ATOM	4303	N	ASP	A	548	68.286	93.190	-31.605	1.00	23.96	A
	ATOM	4304	CA	ASP	A	548	69.138	93.898	-30.660	1.00	23.90	A
	ATOM	4305	CB	ASP	A	548	68.716	95.368	-30.582	1.00	24.37	A
	ATOM	4306	CG	ASP	A	548	68.902	96.099	-31.894	1.00	25.10	A
15	ATOM	4307	OD1	ASP	A	548	70.041	96.129	-32.403	1.00	25.66	A
	ATOM	4308	OD2	ASP	A	548	67.910	96.646	-32.417	1.00	26.21	A
	ATOM	4309	C	ASP	A	548	69.166	93.316	-29.250	1.00	23.40	A
	ATOM	4310	O	ASP	A	548	69.753	93.920	-28.349	1.00	23.41	A
	ATOM	4311	N	ILE	A	549	68.556	92.152	-29.046	1.00	22.05	A
20	ATOM	4312	CA	ILE	A	549	68.546	91.568	-27.707	1.00	21.36	A
	ATOM	4313	CB	ILE	A	549	67.220	91.910	-26.966	1.00	21.60	A
	ATOM	4314	CG2	ILE	A	549	66.031	91.355	-27.727	1.00	21.55	A
	ATOM	4315	CG1	ILE	A	549	67.244	91.341	-25.545	1.00	23.19	A
	ATOM	4316	CD1	ILE	A	549	68.321	91.933	-24.664	1.00	24.78	A
25	ATOM	4317	C	ILE	A	549	68.766	90.057	-27.654	1.00	20.15	A
	ATOM	4318	O	ILE	A	549	69.594	89.577	-26.883	1.00	19.89	A
	ATOM	4319	N	LEU	A	550	68.038	89.311	-28.477	1.00	19.54	A
	ATOM	4320	CA	LEU	A	550	68.156	87.854	-28.483	1.00	19.00	A
	ATOM	4321	CB	LEU	A	550	67.484	87.281	-27.231	1.00	19.06	A
30	ATOM	4322	CG	LEU	A	550	67.584	85.770	-27.011	1.00	18.75	A
	ATOM	4323	CD1	LEU	A	550	69.034	85.393	-26.760	1.00	18.02	A
	ATOM	4324	CD2	LEU	A	550	66.722	85.367	-25.827	1.00	17.92	A
	ATOM	4325	C	LEU	A	550	67.488	87.284	-29.729	1.00	18.70	A
	ATOM	4326	O	LEU	A	550	66.286	87.448	-29.930	1.00	19.34	A
35	ATOM	4327	N	PRO	A	551	68.260	86.597	-30.582	1.00	18.21	A
	ATOM	4328	CD	PRO	A	551	69.734	86.532	-30.610	1.00	18.48	A
	ATOM	4329	CA	PRO	A	551	67.687	86.029	-31.804	1.00	17.94	A
	ATOM	4330	CB	PRO	A	551	68.907	85.875	-32.709	1.00	18.38	A
	ATOM	4331	CG	PRO	A	551	69.995	85.562	-31.741	1.00	19.26	A
40	ATOM	4332	C	PRO	A	551	66.886	84.730	-31.679	1.00	17.64	A
	ATOM	4333	O	PRO	A	551	65.933	84.522	-32.431	1.00	18.20	A
	ATOM	4334	N	SER	A	552	67.253	83.861	-30.743	1.00	16.28	A
	ATOM	4335	CA	SER	A	552	66.539	82.593	-30.604	1.00	15.64	A
	ATOM	4336	CB	SER	A	552	67.260	81.497	-31.393	1.00	15.46	A
45	ATOM	4337	OG	SER	A	552	68.562	81.286	-30.881	1.00	16.20	A
	ATOM	4338	C	SER	A	552	66.361	82.135	-29.164	1.00	14.77	A
	ATOM	4339	O	SER	A	552	66.983	82.665	-28.246	1.00	14.68	A
	ATOM	4340	N	LYS	A	553	65.509	81.132	-28.988	1.00	14.88	A
	ATOM	4341	CA	LYS	A	553	65.204	80.590	-27.672	1.00	14.72	A
50	ATOM	4342	CB	LYS	A	553	63.999	81.333	-27.082	1.00	15.55	A
	ATOM	4343	CG	LYS	A	553	63.458	80.742	-25.780	1.00	16.12	A
	ATOM	4344	CD	LYS	A	553	64.486	80.803	-24.659	1.00	16.06	A
	ATOM	4345	CE	LYS	A	553	64.815	82.244	-24.273	1.00	17.14	A
	ATOM	4346	NZ	LYS	A	553	65.918	82.300	-23.265	1.00	15.93	A
55	ATOM	4347	C	LYS	A	553	64.898	79.092	-27.734	1.00	15.05	A
	ATOM	4348	O	LYS	A	553	64.156	78.631	-28.602	1.00	13.66	A
	ATOM	4349	N	HIS	A	554	65.473	78.336	-26.806	1.00	15.49	A
	ATOM	4350	CA	HIS	A	554	65.231	76.900	-26.747	1.00	15.75	A
	ATOM	4351	CB	HIS	A	554	66.446	76.155	-26.189	1.00	17.73	A

5	ATOM	4352	CG	HIS	A	554	67.584	76.035	-27.152	1.00	19.69	A
	ATOM	4353	CD2	HIS	A	554	68.188	76.955	-27.939	1.00	20.84	A
	ATOM	4354	ND1	HIS	A	554	68.259	74.851	-27.359	1.00	21.35	A
	ATOM	4355	CE1	HIS	A	554	69.231	75.047	-28.230	1.00	20.38	A
	ATOM	4356	NE2	HIS	A	554	69.211	76.316	-28.597	1.00	21.79	A
10	ATOM	4357	C	HIS	A	554	64.040	76.598	-25.851	1.00	15.45	A
	ATOM	4358	O	HIS	A	554	63.872	77.221	-24.802	1.00	15.13	A
	ATOM	4359	N	VAL	A	555	63.223	75.641	-26.280	1.00	14.33	A
	ATOM	4360	CA	VAL	A	555	62.062	75.193	-25.523	1.00	14.09	A
	ATOM	4361	CB	VAL	A	555	60.725	75.652	-26.153	1.00	13.60	A
15	ATOM	4362	CG1	VAL	A	555	60.610	77.170	-26.086	1.00	15.20	A
	ATOM	4363	CG2	VAL	A	555	60.616	75.158	-27.584	1.00	13.42	A
	ATOM	4364	C	VAL	A	555	62.110	73.670	-25.528	1.00	13.62	A
	ATOM	4365	O	VAL	A	555	62.595	73.061	-26.487	1.00	14.40	A
	ATOM	4366	N	VAL	A	556	61.606	73.058	-24.463	1.00	12.29	A
20	ATOM	4367	CA	VAL	A	556	61.618	71.606	-24.346	1.00	11.85	A
	ATOM	4368	CB	VAL	A	556	62.659	71.151	-23.288	1.00	11.87	A
	ATOM	4369	CG1	VAL	A	556	62.602	69.634	-23.110	1.00	10.24	A
	ATOM	4370	CG2	VAL	A	556	64.056	71.590	-23.704	1.00	11.21	A
	ATOM	4371	C	VAL	A	556	60.259	71.052	-23.929	1.00	11.36	A
25	ATOM	4372	O	VAL	A	556	59.624	71.583	-23.022	1.00	10.98	A
	ATOM	4373	N	MET	A	557	59.819	69.985	-24.590	1.00	11.49	A
	ATOM	4374	CA	MET	A	557	58.553	69.343	-24.241	1.00	11.87	A
	ATOM	4375	CB	MET	A	557	57.681	69.128	-25.486	1.00	11.62	A
	ATOM	4376	CG	MET	A	557	56.648	70.219	-25.752	1.00	12.29	A
30	ATOM	4377	SD	MET	A	557	57.365	71.858	-25.911	1.00	12.86	A
	ATOM	4378	CE	MET	A	557	58.354	71.664	-27.421	1.00	12.75	A
	ATOM	4379	C	MET	A	557	58.805	67.992	-23.572	1.00	11.62	A
	ATOM	4380	O	MET	A	557	59.714	67.255	-23.958	1.00	11.99	A
	ATOM	4381	N	HIS	A	558	58.002	67.675	-22.562	1.00	11.19	A
35	ATOM	4382	CA	HIS	A	558	58.114	66.397	-21.864	1.00	10.78	A
	ATOM	4383	CB	HIS	A	558	58.316	66.610	-20.363	1.00	10.37	A
	ATOM	4384	CG	HIS	A	558	58.227	65.348	-19.558	1.00	11.12	A
	ATOM	4385	CD2	HIS	A	558	58.984	64.226	-19.570	1.00	10.73	A
	ATOM	4386	ND1	HIS	A	558	57.259	65.146	-18.596	1.00	10.46	A
40	ATOM	4387	CE1	HIS	A	558	57.426	63.955	-18.051	1.00	10.44	A
	ATOM	4388	NE2	HIS	A	558	58.466	63.377	-18.623	1.00	11.40	A
	ATOM	4389	C	HIS	A	558	56.828	65.611	-22.086	1.00	10.70	A
	ATOM	4390	O	HIS	A	558	55.738	66.191	-22.090	1.00	11.40	A
	ATOM	4391	N	ASN	A	559	56.962	64.299	-22.280	1.00	9.85	A
45	ATOM	4392	CA	ASN	A	559	55.820	63.413	-22.494	1.00	10.04	A
	ATOM	4393	CB	ASN	A	559	55.880	62.807	-23.902	1.00	10.29	A
	ATOM	4394	CG	ASN	A	559	54.865	61.692	-24.102	1.00	10.99	A
	ATOM	4395	OD1	ASN	A	559	53.762	61.738	-23.557	1.00	10.85	A
	ATOM	4396	ND2	ASN	A	559	55.229	60.692	-24.901	1.00	11.25	A
50	ATOM	4397	C	ASN	A	559	55.835	62.307	-21.439	1.00	9.59	A
	ATOM	4398	O	ASN	A	559	56.575	61.332	-21.555	1.00	9.79	A
	ATOM	4399	N	THR	A	560	55.012	62.455	-20.409	1.00	9.86	A
	ATOM	4400	CA	THR	A	560	54.989	61.472	-19.331	1.00	10.97	A
	ATOM	4401	CB	THR	A	560	54.244	62.042	-18.102	1.00	11.06	A
55	ATOM	4402	OG1	THR	A	560	54.560	61.255	-16.949	1.00	10.92	A
	ATOM	4403	CG2	THR	A	560	52.737	62.039	-18.336	1.00	10.12	A
	ATOM	4404	C	THR	A	560	54.391	60.111	-19.717	1.00	11.41	A
	ATOM	4405	O	THR	A	560	54.603	59.112	-19.017	1.00	11.04	A
	ATOM	4406	N	LEU	A	561	53.667	60.069	-20.834	1.00	10.95	A

5	ATOM	4407	CA	LEU	A	561	53.043	58.828	-21.306	1.00	11.48	A
	ATOM	4408	CB	LEU	A	561	51.918	59.153	-22.295	1.00	12.27	A
	ATOM	4409	CG	LEU	A	561	50.793	60.046	-21.747	1.00	12.97	A
	ATOM	4410	CD1	LEU	A	561	49.728	60.265	-22.818	1.00	12.43	A
	ATOM	4411	CD2	LEU	A	561	50.176	59.389	-20.511	1.00	13.32	A
10	ATOM	4412	C	LEU	A	561	54.070	57.892	-21.957	1.00	11.68	A
	ATOM	4413	O	LEU	A	561	54.992	58.345	-22.641	1.00	11.40	A
	ATOM	4414	N	PRO	A	562	53.912	56.569	-21.759	1.00	11.32	A
	ATOM	4415	CD	PRO	A	562	52.919	55.940	-20.867	1.00	10.81	A
	ATOM	4416	CA	PRO	A	562	54.824	55.562	-22.312	1.00	11.80	A
15	ATOM	4417	CB	PRO	A	562	54.605	54.367	-21.389	1.00	10.79	A
	ATOM	4418	CG	PRO	A	562	53.137	54.455	-21.113	1.00	10.79	A
	ATOM	4419	C	PRO	A	562	54.689	55.193	-23.788	1.00	12.65	A
	ATOM	4420	O	PRO	A	562	54.855	54.029	-24.158	1.00	13.27	A
	ATOM	4421	N	HIS	A	563	54.382	56.176	-24.628	1.00	12.72	A
20	ATOM	4422	CA	HIS	A	563	54.294	55.951	-26.066	1.00	13.06	A
	ATOM	4423	CB	HIS	A	563	52.900	55.442	-26.495	1.00	12.83	A
	ATOM	4424	CG	HIS	A	563	51.757	56.313	-26.069	1.00	13.57	A
	ATOM	4425	CD2	HIS	A	563	51.235	57.434	-26.622	1.00	13.78	A
	ATOM	4426	ND1	HIS	A	563	50.971	56.027	-24.972	1.00	13.58	A
25	ATOM	4427	CE1	HIS	A	563	50.013	56.930	-24.871	1.00	13.87	A
	ATOM	4428	NE2	HIS	A	563	50.151	57.796	-25.860	1.00	14.57	A
	ATOM	4429	C	HIS	A	563	54.628	57.248	-26.786	1.00	13.25	A
	ATOM	4430	O	HIS	A	563	54.463	58.332	-26.225	1.00	13.58	A
	ATOM	4431	N	TRP	A	564	55.133	57.142	-28.009	1.00	13.21	A
30	ATOM	4432	CA	TRP	A	564	55.458	58.336	-28.772	1.00	13.90	A
	ATOM	4433	CB	TRP	A	564	55.932	57.978	-30.181	1.00	14.45	A
	ATOM	4434	CG	TRP	A	564	57.363	57.568	-30.235	1.00	14.66	A
	ATOM	4435	CD2	TRP	A	564	58.487	58.433	-30.411	1.00	15.15	A
	ATOM	4436	CE2	TRP	A	564	59.646	57.630	-30.351	1.00	15.51	A
35	ATOM	4437	CE3	TRP	A	564	58.628	59.814	-30.613	1.00	15.70	A
	ATOM	4438	CD1	TRP	A	564	57.864	56.310	-30.081	1.00	15.38	A
	ATOM	4439	NE1	TRP	A	564	59.238	56.337	-30.148	1.00	15.68	A
	ATOM	4440	CZ2	TRP	A	564	60.934	58.159	-30.484	1.00	15.36	A
	ATOM	4441	CZ3	TRP	A	564	59.911	60.343	-30.747	1.00	15.81	A
40	ATOM	4442	CH2	TRP	A	564	61.046	59.515	-30.682	1.00	16.52	A
	ATOM	4443	C	TRP	A	564	54.190	59.160	-28.866	1.00	13.86	A
	ATOM	4444	O	TRP	A	564	53.104	58.614	-29.046	1.00	13.89	A
	ATOM	4445	N	ARG	A	565	54.317	60.472	-28.738	1.00	14.17	A
	ATOM	4446	CA	ARG	A	565	53.135	61.311	-28.821	1.00	14.31	A
45	ATOM	4447	CB	ARG	A	565	52.560	61.579	-27.419	1.00	14.39	A
	ATOM	4448	CG	ARG	A	565	51.352	62.521	-27.424	1.00	15.52	A
	ATOM	4449	CD	ARG	A	565	50.536	62.477	-26.128	1.00	15.96	A
	ATOM	4450	NE	ARG	A	565	51.334	62.761	-24.940	1.00	15.97	A
	ATOM	4451	CZ	ARG	A	565	50.831	63.221	-23.796	1.00	15.92	A
50	ATOM	4452	NH1	ARG	A	565	49.525	63.456	-23.685	1.00	15.90	A
	ATOM	4453	NH2	ARG	A	565	51.631	63.440	-22.762	1.00	14.90	A
	ATOM	4454	C	ARG	A	565	53.385	62.627	-29.525	1.00	14.40	A
	ATOM	4455	O	ARG	A	565	54.436	63.251	-29.361	1.00	13.99	A
	ATOM	4456	N	GLU	A	566	52.413	63.020	-30.339	1.00	14.96	A
55	ATOM	4457	CA	GLU	A	566	52.463	64.287	-31.044	1.00	15.90	A
	ATOM	4458	CB	GLU	A	566	52.236	64.109	-32.546	1.00	17.55	A
	ATOM	4459	CG	GLU	A	566	53.338	63.375	-33.277	1.00	18.99	A
	ATOM	4460	CD	GLU	A	566	53.140	63.416	-34.783	1.00	20.96	A
	ATOM	4461	OE1	GLU	A	566	52.003	63.171	-35.238	1.00	21.39	A

5	ATOM	4517	OH	TYR	A	572	47.956	83.742	-23.482	1.00	20.96	A
	ATOM	4518	C	TYR	A	572	55.149	84.084	-26.832	1.00	15.16	A
	ATOM	4519	O	TYR	A	572	56.165	83.783	-26.206	1.00	15.39	A
	ATOM	4520	N	VAL	A	573	55.166	84.857	-27.916	1.00	15.22	A
	ATOM	4521	CA	VAL	A	573	56.405	85.436	-28.439	1.00	14.74	A
	ATOM	4522	CB	VAL	A	573	56.841	84.759	-29.763	1.00	15.15	A
	ATOM	4523	CG1	VAL	A	573	57.300	83.327	-29.493	1.00	14.52	A
	ATOM	4524	CG2	VAL	A	573	55.690	84.765	-30.754	1.00	14.39	A
10	ATOM	4525	C	VAL	A	573	56.213	86.938	-28.683	1.00	15.63	A
	ATOM	4526	O	VAL	A	573	55.102	87.390	-28.943	1.00	15.28	A
	ATOM	4527	N	SER	A	574	57.298	87.704	-28.602	1.00	16.43	A
	ATOM	4528	CA	SER	A	574	57.233	89.156	-28.783	1.00	17.10	A
15	ATOM	4529	CB	SER	A	574	58.410	89.824	-28.067	1.00	16.27	A
	ATOM	4530	OG	SER	A	574	59.639	89.471	-28.675	1.00	15.14	A
	ATOM	4531	C	SER	A	574	57.206	89.609	-30.241	1.00	18.36	A
	ATOM	4532	O	SER	A	574	57.258	90.808	-30.525	1.00	18.70	A
	ATOM	4533	N	SER	A	575	57.138	88.655	-31.162	1.00	18.80	A
20	ATOM	4534	CA	SER	A	575	57.088	88.968	-32.584	1.00	19.82	A
	ATOM	4535	CB	SER	A	575	58.496	89.096	-33.166	1.00	20.11	A
	ATOM	4536	OG	SER	A	575	58.438	89.191	-34.582	1.00	19.88	A
	ATOM	4537	C	SER	A	575	56.345	87.885	-33.343	1.00	19.97	A
	ATOM	4538	O	SER	A	575	56.423	86.708	-32.997	1.00	20.29	A
	ATOM	4539	N	PRO	A	576	55.601	88.272	-34.387	1.00	20.08	A
25	ATOM	4540	CD	PRO	A	576	55.277	89.649	-34.809	1.00	20.22	A
	ATOM	4541	CA	PRO	A	576	54.856	87.290	-35.179	1.00	19.56	A
	ATOM	4542	CB	PRO	A	576	53.800	88.146	-35.866	1.00	20.22	A
	ATOM	4543	CG	PRO	A	576	54.552	89.428	-36.125	1.00	20.64	A
	ATOM	4544	C	PRO	A	576	55.785	86.602	-36.177	1.00	19.20	A
30	ATOM	4545	O	PRO	A	576	55.448	85.566	-36.741	1.00	19.27	A
	ATOM	4546	N	PHE	A	577	56.961	87.187	-36.380	1.00	18.89	A
	ATOM	4547	CA	PHE	A	577	57.938	86.652	-37.321	1.00	18.98	A
	ATOM	4548	CB	PHE	A	577	58.699	87.807	-37.969	1.00	20.18	A
	ATOM	4549	CG	PHE	A	577	57.805	88.800	-38.658	1.00	21.35	A
35	ATOM	4550	CD1	PHE	A	577	58.050	90.166	-38.554	1.00	22.43	A
	ATOM	4551	CD2	PHE	A	577	56.711	88.369	-39.404	1.00	21.36	A
	ATOM	4552	CE1	PHE	A	577	57.216	91.091	-39.183	1.00	23.04	A
	ATOM	4553	CE2	PHE	A	577	55.870	89.286	-40.038	1.00	22.22	A
	ATOM	4554	CZ	PHE	A	577	56.125	90.650	-39.925	1.00	22.87	A
40	ATOM	4555	C	PHE	A	577	58.907	85.689	-36.643	1.00	18.67	A
	ATOM	4556	O	PHE	A	577	60.089	85.993	-36.463	1.00	18.03	A
	ATOM	4557	N	VAL	A	578	58.387	84.521	-36.280	1.00	18.09	A
	ATOM	4558	CA	VAL	A	578	59.170	83.495	-35.607	1.00	18.08	A
	ATOM	4559	CB	VAL	A	578	58.705	83.330	-34.135	1.00	17.94	A
45	ATOM	4560	CG1	VAL	A	578	59.526	82.252	-33.435	1.00	17.87	A
	ATOM	4561	CG2	VAL	A	578	58.832	84.660	-33.404	1.00	18.13	A
	ATOM	4562	C	VAL	A	578	59.023	82.159	-36.326	1.00	17.84	A
	ATOM	4563	O	VAL	A	578	57.937	81.808	-36.786	1.00	17.94	A
	ATOM	4564	N	SER	A	579	60.123	81.422	-36.428	1.00	18.30	A
50	ATOM	4565	CA	SER	A	579	60.110	80.120	-37.081	1.00	18.55	A
	ATOM	4566	CB	SER	A	579	60.967	80.145	-38.353	1.00	19.76	A
	ATOM	4567	OG	SER	A	579	62.307	80.502	-38.069	1.00	22.42	A
	ATOM	4568	C	SER	A	579	60.627	79.065	-36.110	1.00	17.81	A
	ATOM	4569	O	SER	A	579	61.420	79.363	-35.218	1.00	18.62	A
55	ATOM	4570	N	VAL	A	580	60.173	77.832	-36.292	1.00	16.54	A
	ATOM	4571	CA	VAL	A	580	60.558	76.732	-35.423	1.00	16.12	A

5	ATOM	4572	CB	VAL	A	580	59.304	76.030	-34.851	1.00	16.04	A
	ATOM	4573	CG1	VAL	A	580	59.706	74.975	-33.825	1.00	15.88	A
	ATOM	4574	CG2	VAL	A	580	58.374	77.059	-34.231	1.00	14.55	A
	ATOM	4575	C	VAL	A	580	61.400	75.685	-36.148	1.00	16.46	A
	ATOM	4576	O	VAL	A	580	61.194	75.413	-37.331	1.00	16.12	A
	ATOM	4577	N	THR	A	581	62.348	75.109	-35.416	1.00	16.83	A
	ATOM	4578	CA	THR	A	581	63.231	74.063	-35.926	1.00	17.81	A
	ATOM	4579	CB	THR	A	581	64.600	74.630	-36.369	1.00	17.60	A
10	ATOM	4580	OG1	THR	A	581	65.180	75.374	-35.289	1.00	17.59	A
	ATOM	4581	CG2	THR	A	581	64.450	75.535	-37.592	1.00	17.67	A
	ATOM	4582	C	THR	A	581	63.491	73.086	-34.780	1.00	18.67	A
	ATOM	4583	O	THR	A	581	63.366	73.458	-33.611	1.00	17.83	A
15	ATOM	4584	N	ASP	A	582	63.830	71.839	-35.105	1.00	19.42	A
	ATOM	4585	CA	ASP	A	582	64.150	70.870	-34.063	1.00	20.83	A
	ATOM	4586	CB	ASP	A	582	63.734	69.448	-34.475	1.00	20.66	A
	ATOM	4587	CG	ASP	A	582	64.403	68.966	-35.751	1.00	20.65	A
	ATOM	4588	OD1	ASP	A	582	63.887	67.988	-36.337	1.00	21.09	A
	ATOM	4589	OD2	ASP	A	582	65.434	69.536	-36.164	1.00	18.90	A
20	ATOM	4590	C	ASP	A	582	65.658	70.992	-33.842	1.00	22.10	A
	ATOM	4591	O	ASP	A	582	66.294	71.843	-34.460	1.00	21.76	A
	ATOM	4592	N	LEU	A	583	66.252	70.173	-32.981	1.00	23.97	A
	ATOM	4593	CA	LEU	A	583	67.682	70.345	-32.759	1.00	25.53	A
25	ATOM	4594	CB	LEU	A	583	68.141	69.642	-31.482	1.00	27.13	A
	ATOM	4595	CG	LEU	A	583	69.400	70.340	-30.953	1.00	27.21	A
	ATOM	4596	CD1	LEU	A	583	69.045	71.761	-30.536	1.00	27.75	A
	ATOM	4597	CD2	LEU	A	583	69.984	69.584	-29.789	1.00	28.89	A
	ATOM	4598	C	LEU	A	583	68.566	69.923	-33.926	1.00	25.69	A
	ATOM	4599	O	LEU	A	583	69.760	70.217	-33.934	1.00	26.03	A
30	ATOM	4600	N	ALA	A	584	67.987	69.238	-34.909	1.00	25.08	A
	ATOM	4601	CA	ALA	A	584	68.746	68.822	-36.085	1.00	24.31	A
	ATOM	4602	CB	ALA	A	584	68.185	67.525	-36.648	1.00	24.53	A
	ATOM	4603	C	ALA	A	584	68.630	69.942	-37.114	1.00	24.07	A
	ATOM	4604	O	ALA	A	584	69.059	69.809	-38.263	1.00	23.07	A
35	ATOM	4605	N	ASN	A	585	68.039	71.049	-36.678	1.00	23.90	A
	ATOM	4606	CA	ASN	A	585	67.838	72.221	-37.517	1.00	24.16	A
	ATOM	4607	CB	ASN	A	585	69.160	72.666	-38.148	1.00	26.50	A
	ATOM	4608	CG	ASN	A	585	69.451	74.132	-37.906	1.00	28.18	A
	ATOM	4609	OD1	ASN	A	585	68.570	74.986	-38.038	1.00	28.37	A
40	ATOM	4610	ND2	ASN	A	585	70.695	74.435	-37.555	1.00	29.91	A
	ATOM	4611	C	ASN	A	585	66.805	71.987	-38.614	1.00	23.60	A
	ATOM	4612	O	ASN	A	585	66.774	72.719	-39.604	1.00	23.48	A
	ATOM	4613	N	ASN	A	586	65.970	70.965	-38.451	1.00	21.95	A
45	ATOM	4614	CA	ASN	A	586	64.931	70.690	-39.435	1.00	21.75	A
	ATOM	4615	CB	ASN	A	586	64.356	69.280	-39.281	1.00	22.27	A
	ATOM	4616	CG	ASN	A	586	65.392	68.199	-39.440	1.00	23.42	A
	ATOM	4617	OD1	ASN	A	586	66.173	68.203	-40.391	1.00	23.15	A
	ATOM	4618	ND2	ASN	A	586	65.393	67.244	-38.511	1.00	22.98	A
	ATOM	4619	C	ASN	A	586	63.797	71.674	-39.190	1.00	21.19	A
50	ATOM	4620	O	ASN	A	586	63.369	71.861	-38.053	1.00	20.23	A
	ATOM	4621	N	PRO	A	587	63.296	72.318	-40.250	1.00	20.95	A
	ATOM	4622	CD	PRO	A	587	63.704	72.279	-41.666	1.00	21.61	A
	ATOM	4623	CA	PRO	A	587	62.197	73.264	-40.042	1.00	20.35	A
55	ATOM	4624	CB	PRO	A	587	62.034	73.914	-41.417	1.00	21.29	A
	ATOM	4625	CG	PRO	A	587	62.488	72.839	-42.360	1.00	21.88	A
	ATOM	4626	C	PRO	A	587	60.943	72.525	-39.583	1.00	19.89	A

	ATOM	4627	O	PRO	A	587	60.727	71.366	-39.937	1.00	19.71	A
	ATOM	4628	N	VAL	A	588	60.132	73.195	-38.773	1.00	18.78	A
	ATOM	4629	CA	VAL	A	588	58.897	72.615	-38.258	1.00	18.35	A
	ATOM	4630	CB	VAL	A	588	58.953	72.452	-36.721	1.00	18.72	A
5	ATOM	4631	CG1	VAL	A	588	57.621	71.936	-36.202	1.00	18.58	A
	ATOM	4632	CG2	VAL	A	588	60.079	71.499	-36.338	1.00	17.83	A
	ATOM	4633	C	VAL	A	588	57.777	73.582	-38.617	1.00	18.17	A
	ATOM	4634	O	VAL	A	588	57.871	74.774	-38.325	1.00	17.36	A
	ATOM	4635	N	GLU	A	589	56.727	73.079	-39.259	1.00	18.10	A
10	ATOM	4636	CA	GLU	A	589	55.623	73.947	-39.646	1.00	18.70	A
	ATOM	4637	CB	GLU	A	589	54.571	73.176	-40.441	1.00	20.53	A
	ATOM	4638	CG	GLU	A	589	53.667	74.093	-41.248	1.00	24.87	A
	ATOM	4639	CD	GLU	A	589	52.450	73.389	-41.801	1.00	27.02	A
	ATOM	4640	OE1	GLU	A	589	52.585	72.232	-42.254	1.00	28.61	A
15	ATOM	4641	OE2	GLU	A	589	51.357	73.999	-41.792	1.00	28.42	A
	ATOM	4642	C	GLU	A	589	54.978	74.556	-38.410	1.00	17.96	A
	ATOM	4643	O	GLU	A	589	54.703	73.860	-37.434	1.00	16.94	A
	ATOM	4644	N	ALA	A	590	54.733	75.861	-38.464	1.00	16.87	A
	ATOM	4645	CA	ALA	A	590	54.134	76.569	-37.342	1.00	16.73	A
20	ATOM	4646	CB	ALA	A	590	55.209	77.342	-36.589	1.00	17.08	A
	ATOM	4647	C	ALA	A	590	53.041	77.522	-37.805	1.00	16.62	A
	ATOM	4648	O	ALA	A	590	52.951	77.857	-38.985	1.00	16.45	A
	ATOM	4649	N	GLN	A	591	52.211	77.946	-36.860	1.00	16.54	A
	ATOM	4650	CA	GLN	A	591	51.120	78.876	-37.125	1.00	16.07	A
25	ATOM	4651	CB	GLN	A	591	49.766	78.159	-37.076	1.00	16.36	A
	ATOM	4652	CG	GLN	A	591	48.563	79.105	-37.142	1.00	15.76	A
	ATOM	4653	CD	GLN	A	591	47.238	78.402	-36.876	1.00	15.84	A
	ATOM	4654	OE1	GLN	A	591	46.964	77.337	-37.430	1.00	15.89	A
	ATOM	4655	NE2	GLN	A	591	46.407	79.003	-36.030	1.00	14.94	A
30	ATOM	4656	C	GLN	A	591	51.142	79.938	-36.038	1.00	16.10	A
	ATOM	4657	O	GLN	A	591	51.308	79.624	-34.857	1.00	16.16	A
	ATOM	4658	N	VAL	A	592	50.987	81.196	-36.429	1.00	15.49	A
	ATOM	4659	CA	VAL	A	592	50.959	82.268	-35.449	1.00	15.45	A
	ATOM	4660	CB	VAL	A	592	51.977	83.382	-35.785	1.00	15.57	A
35	ATOM	4661	CG1	VAL	A	592	51.755	84.588	-34.869	1.00	15.47	A
	ATOM	4662	CG2	VAL	A	592	53.398	82.850	-35.599	1.00	15.57	A
	ATOM	4663	C	VAL	A	592	49.551	82.841	-35.412	1.00	15.66	A
	ATOM	4664	O	VAL	A	592	48.917	83.029	-36.450	1.00	16.23	A
	ATOM	4665	N	SER	A	593	49.057	83.078	-34.205	1.00	15.93	A
40	ATOM	4666	CA	SER	A	593	47.728	83.639	-34.001	1.00	16.58	A
	ATOM	4667	CB	SER	A	593	46.768	82.583	-33.434	1.00	16.33	A
	ATOM	4668	OG	SER	A	593	46.591	81.493	-34.328	1.00	17.88	A
	ATOM	4669	C	SER	A	593	47.868	84.775	-33.003	1.00	16.55	A
	ATOM	4670	O	SER	A	593	48.875	84.874	-32.296	1.00	17.21	A
45	ATOM	4671	N	PRO	A	594	46.864	85.657	-32.931	1.00	16.44	A
	ATOM	4672	CD	PRO	A	594	45.738	85.835	-33.863	1.00	16.46	A
	ATOM	4673	CA	PRO	A	594	46.941	86.771	-31.983	1.00	16.18	A
	ATOM	4674	CB	PRO	A	594	45.831	87.713	-32.453	1.00	16.54	A
	ATOM	4675	CG	PRO	A	594	45.607	87.332	-33.898	1.00	16.24	A
50	ATOM	4676	C	PRO	A	594	46.676	86.288	-30.561	1.00	16.50	A
	ATOM	4677	O	PRO	A	594	46.239	85.153	-30.350	1.00	16.26	A
	ATOM	4678	N	VAL	A	595	46.955	87.147	-29.587	1.00	15.96	A
	ATOM	4679	CA	VAL	A	595	46.672	86.821	-28.199	1.00	16.67	A
	ATOM	4680	CB	VAL	A	595	47.782	87.306	-27.241	1.00	16.47	A
55	ATOM	4681	CG1	VAL	A	595	47.348	87.080	-25.792	1.00	16.20	A

5	ATOM	4682	CG2	VAL	A	595	49.071	86.551	-27.516	1.00	17.31	A
	ATOM	4683	C	VAL	A	595	45.382	87.572	-27.895	1.00	16.73	A
	ATOM	4684	O	VAL	A	595	45.386	88.794	-27.765	1.00	17.05	A
	ATOM	4685	N	TRP	A	596	44.277	86.838	-27.809	1.00	16.70	A
	ATOM	4686	CA	TRP	A	596	42.979	87.441	-27.541	1.00	17.84	A
10	ATOM	4687	CB	TRP	A	596	41.890	86.779	-28.400	1.00	17.13	A
	ATOM	4688	CG	TRP	A	596	42.053	86.944	-29.878	1.00	17.49	A
	ATOM	4689	CD2	TRP	A	596	41.740	88.111	-30.649	1.00	17.58	A
	ATOM	4690	CE2	TRP	A	596	42.029	87.810	-31.999	1.00	17.37	A
	ATOM	4691	CE3	TRP	A	596	41.243	89.383	-30.329	1.00	18.00	A
15	ATOM	4692	CD1	TRP	A	596	42.509	86.010	-30.766	1.00	17.26	A
	ATOM	4693	NE1	TRP	A	596	42.494	86.521	-32.042	1.00	17.27	A
	ATOM	4694	CZ2	TRP	A	596	41.837	88.734	-33.031	1.00	18.13	A
	ATOM	4695	CZ3	TRP	A	596	41.050	90.305	-31.359	1.00	18.36	A
	ATOM	4696	CH2	TRP	A	596	41.348	89.974	-32.692	1.00	18.70	A
20	ATOM	4697	C	TRP	A	596	42.569	87.329	-26.077	1.00	18.84	A
	ATOM	4698	O	TRP	A	596	42.689	86.267	-25.466	1.00	17.93	A
	ATOM	4699	N	SER	A	597	42.084	88.434	-25.519	1.00	19.67	A
	ATOM	4700	CA	SER	A	597	41.620	88.451	-24.137	1.00	21.40	A
	ATOM	4701	CB	SER	A	597	42.561	89.280	-23.261	1.00	21.75	A
25	ATOM	4702	OG	SER	A	597	42.699	90.589	-23.774	1.00	24.13	A
	ATOM	4703	C	SER	A	597	40.221	89.055	-24.127	1.00	21.80	A
	ATOM	4704	O	SER	A	597	39.973	90.082	-24.764	1.00	22.44	A
	ATOM	4705	N	TRP	A	598	39.306	88.411	-23.414	1.00	22.12	A
	ATOM	4706	CA	TRP	A	598	37.934	88.888	-23.343	1.00	23.28	A
30	ATOM	4707	CB	TRP	A	598	36.967	87.704	-23.289	1.00	21.46	A
	ATOM	4708	CG	TRP	A	598	36.940	86.928	-24.570	1.00	19.87	A
	ATOM	4709	CD2	TRP	A	598	35.925	86.976	-25.577	1.00	19.13	A
	ATOM	4710	CE2	TRP	A	598	36.334	86.122	-26.627	1.00	18.71	A
	ATOM	4711	CE3	TRP	A	598	34.708	87.662	-25.698	1.00	19.08	A
35	ATOM	4712	CD1	TRP	A	598	37.898	86.070	-25.033	1.00	19.36	A
	ATOM	4713	NE1	TRP	A	598	37.540	85.581	-26.269	1.00	18.19	A
	ATOM	4714	CZ2	TRP	A	598	35.569	85.934	-27.782	1.00	18.54	A
	ATOM	4715	CZ3	TRP	A	598	33.947	87.475	-26.849	1.00	18.32	A
	ATOM	4716	CH2	TRP	A	598	34.382	86.617	-27.876	1.00	18.60	A
40	ATOM	4717	C	TRP	A	598	37.718	89.802	-22.149	1.00	25.15	A
	ATOM	4718	O	TRP	A	598	38.204	89.536	-21.051	1.00	25.24	A
	ATOM	4719	N	HIS	A	599	36.982	90.883	-22.374	1.00	27.74	A
	ATOM	4720	CA	HIS	A	599	36.728	91.848	-21.319	1.00	30.86	A
	ATOM	4721	CB	HIS	A	599	37.605	93.081	-21.542	1.00	32.48	A
45	ATOM	4722	CG	HIS	A	599	39.068	92.770	-21.604	1.00	34.54	A
	ATOM	4723	CD2	HIS	A	599	39.934	92.763	-22.645	1.00	35.10	A
	ATOM	4724	ND1	HIS	A	599	39.793	92.372	-20.500	1.00	35.25	A
	ATOM	4725	CE1	HIS	A	599	41.042	92.135	-20.859	1.00	35.53	A
	ATOM	4726	NE2	HIS	A	599	41.154	92.364	-22.156	1.00	35.52	A
50	ATOM	4727	C	HIS	A	599	35.271	92.268	-21.242	1.00	32.18	A
	ATOM	4728	O	HIS	A	599	34.606	92.441	-22.264	1.00	31.64	A
	ATOM	4729	N	HIS	A	600	34.779	92.420	-20.019	1.00	34.30	A
	ATOM	4730	CA	HIS	A	600	33.407	92.846	-19.803	1.00	36.52	A
	ATOM	4731	CB	HIS	A	600	32.895	92.352	-18.449	1.00	38.40	A
55	ATOM	4732	CG	HIS	A	600	31.437	92.609	-18.225	1.00	40.80	A
	ATOM	4733	CD2	HIS	A	600	30.432	91.782	-17.852	1.00	41.76	A
	ATOM	4734	ND1	HIS	A	600	30.868	93.855	-18.384	1.00	41.71	A
	ATOM	4735	CE1	HIS	A	600	29.575	93.784	-18.120	1.00	42.34	A
	ATOM	4736	NE2	HIS	A	600	29.285	92.537	-17.794	1.00	42.76	A

5	ATOM	4737	C	HIS	A	600	33.452	94.366	-19.820	1.00	36.92	A
	ATOM	4738	O	HIS	A	600	33.792	94.996	-18.820	1.00	37.27	A
	ATOM	4739	N	ASP	A	601	33.128	94.948	-20.969	1.00	37.29	A
	ATOM	4740	CA	ASP	A	601	33.150	96.395	-21.125	1.00	37.97	A
	ATOM	4741	CB	ASP	A	601	32.959	96.763	-22.597	1.00	38.10	A
	ATOM	4742	CG	ASP	A	601	33.355	98.194	-22.895	1.00	38.67	A
	ATOM	4743	OD1	ASP	A	601	32.854	99.111	-22.211	1.00	38.47	A
	ATOM	4744	OD2	ASP	A	601	34.167	98.403	-23.819	1.00	39.33	A
10	ATOM	4745	C	ASP	A	601	32.062	97.056	-20.280	1.00	38.23	A
	ATOM	4746	O	ASP	A	601	30.881	97.001	-20.619	1.00	37.93	A
	ATOM	4747	N	THR	A	602	32.474	97.682	-19.181	1.00	38.57	A
	ATOM	4748	CA	THR	A	602	31.548	98.357	-18.278	1.00	39.06	A
15	ATOM	4749	CB	THR	A	602	32.284	98.918	-17.040	1.00	39.91	A
	ATOM	4750	OG1	THR	A	602	32.925	97.847	-16.337	1.00	41.22	A
	ATOM	4751	CG2	THR	A	602	31.302	99.616	-16.103	1.00	40.79	A
	ATOM	4752	C	THR	A	602	30.826	99.510	-18.965	1.00	38.24	A
	ATOM	4753	O	THR	A	602	29.726	99.887	-18.565	1.00	38.57	A
20	ATOM	4754	N	LEU	A	603	31.448	100.063	-20.001	1.00	37.19	A
	ATOM	4755	CA	LEU	A	603	30.869	101.184	-20.733	1.00	36.14	A
	ATOM	4756	CB	LEU	A	603	31.974	102.006	-21.408	1.00	37.37	A
	ATOM	4757	CG	LEU	A	603	32.946	102.778	-20.508	1.00	38.24	A
	ATOM	4758	CD1	LEU	A	603	32.160	103.719	-19.607	1.00	38.55	A
	ATOM	4759	CD2	LEU	A	603	33.775	101.811	-19.677	1.00	38.91	A
25	ATOM	4760	C	LEU	A	603	29.840	100.766	-21.780	1.00	34.77	A
	ATOM	4761	O	LEU	A	603	28.693	101.207	-21.739	1.00	34.31	A
	ATOM	4762	N	THR	A	604	30.255	99.921	-22.717	1.00	32.64	A
	ATOM	4763	CA	THR	A	604	29.364	99.462	-23.778	1.00	30.71	A
30	ATOM	4764	CB	THR	A	604	30.162	98.985	-25.002	1.00	30.78	A
	ATOM	4765	OG1	THR	A	604	30.970	97.859	-24.632	1.00	30.69	A
	ATOM	4766	CG2	THR	A	604	31.059	100.102	-25.521	1.00	30.88	A
	ATOM	4767	C	THR	A	604	28.459	98.321	-23.329	1.00	29.37	A
	ATOM	4768	O	THR	A	604	27.567	97.901	-24.065	1.00	28.33	A
35	ATOM	4769	N	LYS	A	605	28.693	97.821	-22.121	1.00	28.18	A
	ATOM	4770	CA	LYS	A	605	27.897	96.723	-21.582	1.00	27.68	A
	ATOM	4771	CB	LYS	A	605	26.457	97.185	-21.341	1.00	28.11	A
	ATOM	4772	CG	LYS	A	605	26.335	98.324	-20.344	1.00	28.53	A
	ATOM	4773	CD	LYS	A	605	26.807	97.904	-18.959	1.00	29.48	A
40	ATOM	4774	CE	LYS	A	605	26.707	99.058	-17.972	1.00	29.77	A
	ATOM	4775	NZ	LYS	A	605	27.095	98.651	-16.595	1.00	30.78	A
	ATOM	4776	C	LYS	A	605	27.898	95.510	-22.511	1.00	27.31	A
	ATOM	4777	O	LYS	A	605	26.866	94.871	-22.710	1.00	26.97	A
	ATOM	4778	N	THR	A	606	29.058	95.206	-23.085	1.00	26.32	A
45	ATOM	4779	CA	THR	A	606	29.202	94.062	-23.980	1.00	25.60	A
	ATOM	4780	CB	THR	A	606	29.343	94.497	-25.457	1.00	26.18	A
	ATOM	4781	OG1	THR	A	606	30.502	95.331	-25.602	1.00	26.47	A
	ATOM	4782	CG2	THR	A	606	28.109	95.259	-25.912	1.00	26.21	A
	ATOM	4783	C	THR	A	606	30.457	93.289	-23.604	1.00	24.69	A
50	ATOM	4784	O	THR	A	606	31.376	93.839	-23.002	1.00	24.74	A
	ATOM	4785	N	ILE	A	607	30.484	92.006	-23.944	1.00	24.05	A
	ATOM	4786	CA	ILE	A	607	31.644	91.171	-23.664	1.00	22.70	A
	ATOM	4787	CB	ILE	A	607	31.224	89.817	-23.069	1.00	22.67	A
	ATOM	4788	CG2	ILE	A	607	32.460	88.983	-22.758	1.00	22.01	A
55	ATOM	4789	CG1	ILE	A	607	30.404	90.044	-21.794	1.00	22.63	A
	ATOM	4790	CD1	ILE	A	607	29.720	88.803	-21.269	1.00	22.99	A
	ATOM	4791	C	ILE	A	607	32.333	90.954	-25.007	1.00	22.58	A

5	ATOM	4792	O	ILE	A	607	31.809	90.258	-25.876	1.00	21.18	A
	ATOM	4793	N	HIS	A	608	33.502	91.564	-25.186	1.00	22.73	A
	ATOM	4794	CA	HIS	A	608	34.219	91.438	-26.449	1.00	23.11	A
	ATOM	4795	CB	HIS	A	608	33.964	92.669	-27.321	1.00	24.32	A
	ATOM	4796	CG	HIS	A	608	34.488	93.942	-26.738	1.00	26.13	A
	ATOM	4797	CD2	HIS	A	608	35.450	94.791	-27.172	1.00	26.91	A
	ATOM	4798	ND1	HIS	A	608	34.011	94.474	-25.560	1.00	27.07	A
	ATOM	4799	CE1	HIS	A	608	34.656	95.597	-25.293	1.00	27.16	A
10	ATOM	4800	NE2	HIS	A	608	35.535	95.811	-26.256	1.00	28.09	A
	ATOM	4801	C	HIS	A	608	35.718	91.225	-26.273	1.00	22.57	A
	ATOM	4802	O	HIS	A	608	36.291	91.545	-25.228	1.00	23.04	A
	ATOM	4803	N	PRO	A	609	36.378	90.684	-27.308	1.00	22.03	A
15	ATOM	4804	CD	PRO	A	609	35.781	90.110	-28.530	1.00	21.85	A
	ATOM	4805	CA	PRO	A	609	37.814	90.419	-27.261	1.00	21.59	A
	ATOM	4806	CB	PRO	A	609	37.950	89.193	-28.147	1.00	21.45	A
	ATOM	4807	CG	PRO	A	609	36.992	89.524	-29.258	1.00	21.74	A
	ATOM	4808	C	PRO	A	609	38.708	91.555	-27.732	1.00	21.64	A
	ATOM	4809	O	PRO	A	609	38.364	92.296	-28.653	1.00	21.84	A
20	ATOM	4810	N	GLN	A	610	39.859	91.678	-27.082	1.00	21.61	A
	ATOM	4811	CA	GLN	A	610	40.851	92.682	-27.434	1.00	22.66	A
	ATOM	4812	CB	GLN	A	610	41.132	93.622	-26.256	1.00	24.57	A
	ATOM	4813	CG	GLN	A	610	39.950	94.484	-25.830	1.00	28.22	A
	ATOM	4814	CD	GLN	A	610	40.335	95.514	-24.778	1.00	30.69	A
25	ATOM	4815	OE1	GLN	A	610	40.844	95.169	-23.708	1.00	32.27	A
	ATOM	4816	NE2	GLN	A	610	40.097	96.787	-25.079	1.00	31.93	A
	ATOM	4817	C	GLN	A	610	42.115	91.908	-27.782	1.00	21.64	A
	ATOM	4818	O	GLN	A	610	42.467	90.949	-27.096	1.00	21.23	A
30	ATOM	4819	N	GLY	A	611	42.786	92.314	-28.853	1.00	21.34	A
	ATOM	4820	CA	GLY	A	611	43.999	91.630	-29.255	1.00	21.13	A
	ATOM	4821	C	GLY	A	611	45.250	92.379	-28.846	1.00	21.53	A
	ATOM	4822	O	GLY	A	611	45.275	93.612	-28.844	1.00	20.93	A
	ATOM	4823	N	SER	A	612	46.292	91.635	-28.489	1.00	21.82	A
	ATOM	4824	CA	SER	A	612	47.557	92.240	-28.088	1.00	22.69	A
35	ATOM	4825	CB	SER	A	612	48.436	91.213	-27.373	1.00	22.23	A
	ATOM	4826	OG	SER	A	612	49.741	91.726	-27.170	1.00	22.93	A
	ATOM	4827	C	SER	A	612	48.303	92.766	-29.306	1.00	23.02	A
	ATOM	4828	O	SER	A	612	48.214	92.191	-30.390	1.00	22.36	A
	ATOM	4829	N	THR	A	613	49.042	93.859	-29.124	1.00	24.55	A
40	ATOM	4830	CA	THR	A	613	49.816	94.444	-30.215	1.00	26.10	A
	ATOM	4831	CB	THR	A	613	49.543	95.956	-30.360	1.00	26.58	A
	ATOM	4832	OG1	THR	A	613	49.906	96.624	-29.146	1.00	26.56	A
	ATOM	4833	CG2	THR	A	613	48.069	96.209	-30.659	1.00	26.70	A
	ATOM	4834	C	THR	A	613	51.315	94.252	-29.981	1.00	26.90	A
45	ATOM	4835	O	THR	A	613	52.137	94.754	-30.751	1.00	27.81	A
	ATOM	4836	N	THR	A	614	51.664	93.516	-28.926	1.00	27.11	A
	ATOM	4837	CA	THR	A	614	53.065	93.267	-28.583	1.00	26.76	A
	ATOM	4838	CB	THR	A	614	53.473	94.063	-27.334	1.00	26.86	A
	ATOM	4839	OG1	THR	A	614	52.581	93.747	-26.257	1.00	27.69	A
50	ATOM	4840	CG2	THR	A	614	53.423	95.559	-27.611	1.00	27.62	A
	ATOM	4841	C	THR	A	614	53.373	91.794	-28.302	1.00	26.34	A
	ATOM	4842	O	THR	A	614	54.538	91.399	-28.220	1.00	26.24	A
	ATOM	4843	N	LYS	A	615	52.327	90.990	-28.154	1.00	25.09	A
55	ATOM	4844	CA	LYS	A	615	52.472	89.571	-27.851	1.00	24.09	A
	ATOM	4845	CB	LYS	A	615	51.954	89.321	-26.431	1.00	25.41	A
	ATOM	4846	CG	LYS	A	615	51.857	87.870	-26.014	1.00	27.19	A

5	ATOM	4847	CD	LYS	A	615	51.015	87.725	-24.744	1.00	27.93	A
	ATOM	4848	CE	LYS	A	615	51.588	88.525	-23.584	1.00	27.89	A
	ATOM	4849	NZ	LYS	A	615	50.778	88.352	-22.342	1.00	27.53	A
	ATOM	4850	C	LYS	A	615	51.685	88.728	-28.856	1.00	23.27	A
	ATOM	4851	O	LYS	A	615	50.591	89.115	-29.270	1.00	22.28	A
10	ATOM	4852	N	TYR	A	616	52.245	87.584	-29.247	1.00	21.79	A
	ATOM	4853	CA	TYR	A	616	51.587	86.691	-30.203	1.00	21.06	A
	ATOM	4854	CB	TYR	A	616	52.142	86.919	-31.612	1.00	21.55	A
	ATOM	4855	CG	TYR	A	616	52.149	88.375	-32.006	1.00	22.85	A
	ATOM	4856	CD1	TYR	A	616	53.238	89.189	-31.703	1.00	23.03	A
15	ATOM	4857	CE1	TYR	A	616	53.219	90.549	-31.980	1.00	24.34	A
	ATOM	4858	CD2	TYR	A	616	51.033	88.958	-32.608	1.00	23.49	A
	ATOM	4859	CE2	TYR	A	616	51.001	90.323	-32.889	1.00	24.46	A
	ATOM	4860	CZ	TYR	A	616	52.096	91.109	-32.571	1.00	24.68	A
	ATOM	4861	OH	TYR	A	616	52.071	92.459	-32.834	1.00	26.72	A
20	ATOM	4862	C	TYR	A	616	51.763	85.225	-29.818	1.00	20.41	A
	ATOM	4863	O	TYR	A	616	52.678	84.882	-29.074	1.00	19.70	A
	ATOM	4864	N	ARG	A	617	50.877	84.369	-30.325	1.00	19.68	A
	ATOM	4865	CA	ARG	A	617	50.935	82.933	-30.040	1.00	19.19	A
	ATOM	4866	CB	ARG	A	617	49.532	82.362	-29.785	1.00	19.61	A
25	ATOM	4867	CG	ARG	A	617	48.874	82.714	-28.463	1.00	20.82	A
	ATOM	4868	CD	ARG	A	617	47.484	82.072	-28.372	1.00	20.39	A
	ATOM	4869	NE	ARG	A	617	47.535	80.608	-28.387	1.00	20.23	A
	ATOM	4870	CZ	ARG	A	617	46.866	79.838	-29.242	1.00	20.36	A
	ATOM	4871	NH1	ARG	A	617	46.089	80.382	-30.168	1.00	20.60	A
30	ATOM	4872	NH2	ARG	A	617	46.972	78.518	-29.173	1.00	19.63	A
	ATOM	4873	C	ARG	A	617	51.528	82.154	-31.208	1.00	18.48	A
	ATOM	4874	O	ARG	A	617	51.040	82.269	-32.331	1.00	19.11	A
	ATOM	4875	N	ILE	A	618	52.578	81.372	-30.960	1.00	17.34	A
	ATOM	4876	CA	ILE	A	618	53.132	80.547	-32.026	1.00	15.98	A
35	ATOM	4877	CB	ILE	A	618	54.666	80.704	-32.193	1.00	15.88	A
	ATOM	4878	CG2	ILE	A	618	55.399	80.260	-30.938	1.00	15.95	A
	ATOM	4879	CG1	ILE	A	618	55.116	79.898	-33.418	1.00	16.57	A
	ATOM	4880	CD1	ILE	A	618	56.481	80.267	-33.950	1.00	16.76	A
	ATOM	4881	C	ILE	A	618	52.771	79.113	-31.666	1.00	15.58	A
40	ATOM	4882	O	ILE	A	618	52.940	78.687	-30.526	1.00	15.88	A
	ATOM	4883	N	ILE	A	619	52.246	78.384	-32.643	1.00	15.22	A
	ATOM	4884	CA	ILE	A	619	51.802	77.014	-32.439	1.00	15.30	A
	ATOM	4885	CB	ILE	A	619	50.287	76.916	-32.675	1.00	16.02	A
	ATOM	4886	CG2	ILE	A	619	49.788	75.529	-32.309	1.00	17.07	A
45	ATOM	4887	CG1	ILE	A	619	49.568	78.006	-31.874	1.00	16.94	A
	ATOM	4888	CD1	ILE	A	619	48.223	78.411	-32.464	1.00	18.02	A
	ATOM	4889	C	ILE	A	619	52.484	76.047	-33.399	1.00	15.21	A
	ATOM	4890	O	ILE	A	619	52.638	76.344	-34.581	1.00	14.85	A
	ATOM	4891	N	PHE	A	620	52.880	74.885	-32.891	1.00	14.42	A
50	ATOM	4892	CA	PHE	A	620	53.513	73.883	-33.736	1.00	14.06	A
	ATOM	4893	CB	PHE	A	620	54.991	74.225	-33.971	1.00	13.22	A
	ATOM	4894	CG	PHE	A	620	55.856	74.111	-32.747	1.00	13.06	A
	ATOM	4895	CD1	PHE	A	620	56.459	72.898	-32.416	1.00	13.53	A
	ATOM	4896	CD2	PHE	A	620	56.093	75.219	-31.941	1.00	12.76	A
55	ATOM	4897	CE1	PHE	A	620	57.292	72.791	-31.299	1.00	12.66	A
	ATOM	4898	CE2	PHE	A	620	56.925	75.125	-30.822	1.00	13.48	A
	ATOM	4899	CZ	PHE	A	620	57.525	73.904	-30.503	1.00	13.08	A
	ATOM	4900	C	PHE	A	620	53.366	72.492	-33.137	1.00	14.55	A
	ATOM	4901	O	PHE	A	620	53.085	72.342	-31.951	1.00	14.92	A

5	ATOM	4902	N	LYS	A	621	53.544	71.476	-33.970	1.00	15.26	A
	ATOM	4903	CA	LYS	A	621	53.410	70.099	-33.525	1.00	16.30	A
	ATOM	4904	CB	LYS	A	621	52.949	69.221	-34.697	1.00	17.42	A
	ATOM	4905	CG	LYS	A	621	52.734	67.756	-34.335	1.00	19.29	A
	ATOM	4906	CD	LYS	A	621	51.896	67.035	-35.388	1.00	20.90	A
	ATOM	4907	CE	LYS	A	621	52.568	67.041	-36.747	1.00	22.97	A
	ATOM	4908	NZ	LYS	A	621	51.720	66.378	-37.784	1.00	25.48	A
	ATOM	4909	C	LYS	A	621	54.697	69.547	-32.935	1.00	15.54	A
10	ATOM	4910	O	LYS	A	621	55.717	69.466	-33.617	1.00	15.67	A
	ATOM	4911	N	ALA	A	622	54.652	69.178	-31.658	1.00	15.03	A
	ATOM	4912	CA	ALA	A	622	55.821	68.606	-31.006	1.00	15.03	A
	ATOM	4913	CB	ALA	A	622	55.934	69.116	-29.564	1.00	14.73	A
15	ATOM	4914	C	ALA	A	622	55.682	67.086	-31.017	1.00	15.03	A
	ATOM	4915	O	ALA	A	622	54.585	66.554	-30.851	1.00	15.48	A
	ATOM	4916	N	ARG	A	623	56.795	66.394	-31.237	1.00	15.27	A
	ATOM	4917	CA	ARG	A	623	56.811	64.936	-31.256	1.00	14.94	A
	ATOM	4918	CB	ARG	A	623	57.245	64.427	-32.636	1.00	16.29	A
20	ATOM	4919	CG	ARG	A	623	57.267	62.912	-32.755	1.00	18.27	A
	ATOM	4920	CD	ARG	A	623	57.285	62.467	-34.216	1.00	20.74	A
	ATOM	4921	NE	ARG	A	623	57.525	61.032	-34.338	1.00	22.01	A
	ATOM	4922	CZ	ARG	A	623	58.723	60.467	-34.232	1.00	23.12	A
	ATOM	4923	NH1	ARG	A	623	59.796	61.215	-34.009	1.00	24.09	A
25	ATOM	4924	NH2	ARG	A	623	58.847	59.151	-34.333	1.00	24.41	A
	ATOM	4925	C	ARG	A	623	57.804	64.530	-30.176	1.00	14.36	A
	ATOM	4926	O	ARG	A	623	58.992	64.846	-30.255	1.00	13.60	A
	ATOM	4927	N	VAL	A	624	57.308	63.828	-29.162	1.00	13.85	A
	ATOM	4928	CA	VAL	A	624	58.131	63.447	-28.021	1.00	13.51	A
30	ATOM	4929	CB	VAL	A	624	57.581	64.122	-26.747	1.00	13.54	A
	ATOM	4930	CG1	VAL	A	624	58.635	64.120	-25.645	1.00	13.13	A
	ATOM	4931	CG2	VAL	A	624	57.128	65.544	-27.075	1.00	14.31	A
	ATOM	4932	C	VAL	A	624	58.200	61.943	-27.775	1.00	12.85	A
	ATOM	4933	O	VAL	A	624	57.204	61.243	-27.906	1.00	12.59	A
35	ATOM	4934	N	PRO	A	625	59.384	61.435	-27.396	1.00	13.31	A
	ATOM	4935	CD	PRO	A	625	60.665	62.157	-27.305	1.00	13.68	A
	ATOM	4936	CA	PRO	A	625	59.574	60.006	-27.128	1.00	12.93	A
	ATOM	4937	CB	PRO	A	625	61.074	59.900	-26.850	1.00	13.69	A
	ATOM	4938	CG	PRO	A	625	61.660	61.067	-27.599	1.00	14.65	A
40	ATOM	4939	C	PRO	A	625	58.758	59.549	-25.917	1.00	12.52	A
	ATOM	4940	O	PRO	A	625	58.333	60.365	-25.099	1.00	10.81	A
	ATOM	4941	N	PRO	A	626	58.537	58.230	-25.787	1.00	12.53	A
	ATOM	4942	CD	PRO	A	626	59.072	57.125	-26.600	1.00	11.95	A
	ATOM	4943	CA	PRO	A	626	57.773	57.725	-24.643	1.00	12.15	A
45	ATOM	4944	CB	PRO	A	626	57.838	56.207	-24.818	1.00	12.36	A
	ATOM	4945	CG	PRO	A	626	58.103	56.014	-26.296	1.00	12.88	A
	ATOM	4946	C	PRO	A	626	58.526	58.164	-23.384	1.00	12.11	A
	ATOM	4947	O	PRO	A	626	59.747	58.026	-23.325	1.00	12.43	A
	ATOM	4948	N	MET	A	627	57.812	58.690	-22.391	1.00	11.82	A
50	ATOM	4949	CA	MET	A	627	58.444	59.126	-21.146	1.00	11.98	A
	ATOM	4950	CB	MET	A	627	58.725	57.900	-20.268	1.00	12.88	A
	ATOM	4951	CG	MET	A	627	57.458	57.181	-19.813	1.00	13.06	A
	ATOM	4952	SD	MET	A	627	57.753	55.522	-19.152	1.00	15.42	A
	ATOM	4953	CE	MET	A	627	58.563	55.905	-17.601	1.00	15.23	A
55	ATOM	4954	C	MET	A	627	59.745	59.877	-21.434	1.00	11.93	A
	ATOM	4955	O	MET	A	627	60.749	59.697	-20.736	1.00	11.21	A
	ATOM	4956	N	GLY	A	628	59.716	60.737	-22.453	1.00	11.85	A

	ATOM	4957	CA	GLY	A	628	60.917	61.460	-22.830	1.00	11.48	A
	ATOM	4958	C	GLY	A	628	60.822	62.957	-23.040	1.00	11.99	A
	ATOM	4959	O	GLY	A	628	59.846	63.600	-22.646	1.00	11.25	A
5	ATOM	4960	N	LEU	A	629	61.854	63.506	-23.678	1.00	11.91	A
	ATOM	4961	CA	LEU	A	629	61.943	64.938	-23.941	1.00	12.42	A
	ATOM	4962	CB	LEU	A	629	62.964	65.569	-22.996	1.00	12.70	A
	ATOM	4963	CG	LEU	A	629	62.725	65.362	-21.500	1.00	13.60	A
	ATOM	4964	CD1	LEU	A	629	63.990	65.686	-20.726	1.00	14.03	A
10	ATOM	4965	CD2	LEU	A	629	61.566	66.241	-21.047	1.00	13.10	A
	ATOM	4966	C	LEU	A	629	62.372	65.222	-25.378	1.00	12.55	A
	ATOM	4967	O	LEU	A	629	63.074	64.420	-25.996	1.00	12.86	A
	ATOM	4968	N	ALA	A	630	61.947	66.369	-25.899	1.00	13.11	A
	ATOM	4969	CA	ALA	A	630	62.307	66.788	-27.250	1.00	13.46	A
15	ATOM	4970	CB	ALA	A	630	61.203	66.436	-28.240	1.00	13.44	A
	ATOM	4971	C	ALA	A	630	62.534	68.293	-27.218	1.00	13.75	A
	ATOM	4972	O	ALA	A	630	61.705	69.048	-26.697	1.00	13.55	A
	ATOM	4973	N	THR	A	631	63.660	68.721	-27.779	1.00	13.65	A
	ATOM	4974	CA	THR	A	631	64.035	70.134	-27.796	1.00	13.96	A
20	ATOM	4975	CB	THR	A	631	65.534	70.284	-27.460	1.00	14.42	A
	ATOM	4976	OG1	THR	A	631	65.822	69.568	-26.253	1.00	13.45	A
	ATOM	4977	CG2	THR	A	631	65.910	71.751	-27.280	1.00	13.92	A
	ATOM	4978	C	THR	A	631	63.782	70.815	-29.141	1.00	14.26	A
	ATOM	4979	O	THR	A	631	64.048	70.237	-30.191	1.00	14.41	A
25	ATOM	4980	N	TYR	A	632	63.264	72.042	-29.097	1.00	13.91	A
	ATOM	4981	CA	TYR	A	632	63.023	72.822	-30.306	1.00	13.94	A
	ATOM	4982	CB	TYR	A	632	61.526	72.939	-30.614	1.00	13.86	A
	ATOM	4983	CG	TYR	A	632	60.869	71.623	-30.964	1.00	14.19	A
	ATOM	4984	CD1	TYR	A	632	60.486	70.726	-29.967	1.00	14.07	A
30	ATOM	4985	CE1	TYR	A	632	59.911	69.499	-30.286	1.00	14.45	A
	ATOM	4986	CD2	TYR	A	632	60.658	71.260	-32.294	1.00	14.41	A
	ATOM	4987	CE2	TYR	A	632	60.083	70.032	-32.626	1.00	14.34	A
	ATOM	4988	CZ	TYR	A	632	59.715	69.157	-31.615	1.00	14.95	A
	ATOM	4989	OH	TYR	A	632	59.163	67.936	-31.929	1.00	14.79	A
35	ATOM	4990	C	TYR	A	632	63.618	74.214	-30.122	1.00	14.02	A
	ATOM	4991	O	TYR	A	632	63.963	74.607	-29.007	1.00	13.93	A
	ATOM	4992	N	VAL	A	633	63.739	74.954	-31.219	1.00	13.56	A
	ATOM	4993	CA	VAL	A	633	64.295	76.300	-31.175	1.00	14.28	A
	ATOM	4994	CB	VAL	A	633	65.691	76.348	-31.847	1.00	14.34	A
40	ATOM	4995	CG1	VAL	A	633	66.245	77.778	-31.817	1.00	14.97	A
	ATOM	4996	CG2	VAL	A	633	66.639	75.388	-31.138	1.00	15.01	A
	ATOM	4997	C	VAL	A	633	63.375	77.285	-31.894	1.00	14.46	A
	ATOM	4998	O	VAL	A	633	62.889	77.005	-32.990	1.00	14.06	A
	ATOM	4999	N	LEU	A	634	63.121	78.424	-31.260	1.00	14.84	A
45	ATOM	5000	CA	LEU	A	634	62.284	79.461	-31.860	1.00	15.74	A
	ATOM	5001	CB	LEU	A	634	61.260	79.989	-30.855	1.00	16.60	A
	ATOM	5002	CG	LEU	A	634	60.337	78.965	-30.188	1.00	18.43	A
	ATOM	5003	CD1	LEU	A	634	59.245	79.713	-29.430	1.00	18.47	A
	ATOM	5004	CD2	LEU	A	634	59.723	78.042	-31.224	1.00	18.25	A
50	ATOM	5005	C	LEU	A	634	63.225	80.586	-32.266	1.00	16.10	A
	ATOM	5006	O	LEU	A	634	63.980	81.095	-31.440	1.00	15.57	A
	ATOM	5007	N	THR	A	635	63.180	80.965	-33.539	1.00	16.37	A
	ATOM	5008	CA	THR	A	635	64.056	82.008	-34.054	1.00	16.51	A
	ATOM	5009	CB	THR	A	635	65.024	81.425	-35.095	1.00	16.04	A
	ATOM	5010	OG1	THR	A	635	65.704	80.297	-34.529	1.00	15.93	A
55	ATOM	5011	CG2	THR	A	635	66.044	82.469	-35.528	1.00	15.17	A

5	ATOM	5012	C	THR	A	635	63.260	83.132	-34.708	1.00	17.49	A
	ATOM	5013	O	THR	A	635	62.313	82.883	-35.453	1.00	17.17	A
	ATOM	5014	N	ILE	A	636	63.656	84.370	-34.434	1.00	18.82	A
	ATOM	5015	CA	ILE	A	636	62.970	85.524	-35.003	1.00	20.25	A
	ATOM	5016	CB	ILE	A	636	63.010	86.730	-34.028	1.00	20.80	A
10	ATOM	5017	CG2	ILE	A	636	64.445	87.193	-33.837	1.00	20.78	A
	ATOM	5018	CG1	ILE	A	636	62.156	87.881	-34.568	1.00	20.89	A
	ATOM	5019	CD1	ILE	A	636	62.027	89.054	-33.608	1.00	22.07	A
	ATOM	5020	C	ILE	A	636	63.628	85.922	-36.320	1.00	21.26	A
	ATOM	5021	O	ILE	A	636	64.806	85.647	-36.541	1.00	21.01	A
15	ATOM	5022	N	SER	A	637	62.854	86.548	-37.200	1.00	23.08	A
	ATOM	5023	CA	SER	A	637	63.370	87.011	-38.484	1.00	24.95	A
	ATOM	5024	CB	SER	A	637	63.007	86.033	-39.608	1.00	25.80	A
	ATOM	5025	OG	SER	A	637	61.607	85.875	-39.728	1.00	28.22	A
	ATOM	5026	C	SER	A	637	62.765	88.386	-38.755	1.00	25.93	A
20	ATOM	5027	O	SER	A	637	61.821	88.792	-38.081	1.00	25.09	A
	ATOM	5028	N	ASP	A	638	63.310	89.105	-39.729	1.00	27.88	A
	ATOM	5029	CA	ASP	A	638	62.805	90.437	-40.042	1.00	30.30	A
	ATOM	5030	CB	ASP	A	638	63.804	91.193	-40.928	1.00	32.47	A
	ATOM	5031	CG	ASP	A	638	64.112	90.463	-42.221	1.00	35.12	A
25	ATOM	5032	OD1	ASP	A	638	63.169	90.178	-42.989	1.00	36.91	A
	ATOM	5033	OD2	ASP	A	638	65.304	90.178	-42.476	1.00	37.58	A
	ATOM	5034	C	ASP	A	638	61.438	90.398	-40.717	1.00	30.50	A
	ATOM	5035	O	ASP	A	638	60.624	91.306	-40.536	1.00	31.30	A
	ATOM	5036	N	SER	A	639	61.181	89.339	-41.479	1.00	30.26	A
30	ATOM	5037	CA	SER	A	639	59.913	89.202	-42.184	1.00	30.17	A
	ATOM	5038	CB	SER	A	639	60.112	89.497	-43.672	1.00	30.34	A
	ATOM	5039	OG	SER	A	639	61.072	88.619	-44.232	1.00	30.45	A
	ATOM	5040	C	SER	A	639	59.313	87.812	-42.016	1.00	29.83	A
	ATOM	5041	O	SER	A	639	59.906	86.942	-41.383	1.00	29.34	A
35	ATOM	5042	N	LYS	A	640	58.135	87.609	-42.598	1.00	29.49	A
	ATOM	5043	CA	LYS	A	640	57.448	86.328	-42.506	1.00	29.38	A
	ATOM	5044	CB	LYS	A	640	56.160	86.354	-43.334	1.00	30.45	A
	ATOM	5045	CG	LYS	A	640	55.128	87.348	-42.825	1.00	32.56	A
	ATOM	5046	CD	LYS	A	640	53.757	87.126	-43.449	1.00	34.03	A
40	ATOM	5047	CE	LYS	A	640	53.763	87.376	-44.945	1.00	34.65	A
	ATOM	5048	NZ	LYS	A	640	52.396	87.213	-45.510	1.00	35.65	A
	ATOM	5049	C	LYS	A	640	58.303	85.140	-42.934	1.00	28.37	A
	ATOM	5050	O	LYS	A	640	58.718	85.041	-44.088	1.00	28.39	A
	ATOM	5051	N	PRO	A	641	58.581	84.221	-41.996	1.00	27.43	A
45	ATOM	5052	CD	PRO	A	641	58.213	84.267	-40.571	1.00	27.24	A
	ATOM	5053	CA	PRO	A	641	59.387	83.034	-42.288	1.00	26.57	A
	ATOM	5054	CB	PRO	A	641	59.674	82.465	-40.901	1.00	27.13	A
	ATOM	5055	CG	PRO	A	641	58.461	82.844	-40.132	1.00	27.56	A
	ATOM	5056	C	PRO	A	641	58.630	82.056	-43.187	1.00	25.67	A
50	ATOM	5057	O	PRO	A	641	57.400	82.001	-43.176	1.00	24.50	A
	ATOM	5058	N	GLU	A	642	59.382	81.282	-43.958	1.00	25.02	A
	ATOM	5059	CA	GLU	A	642	58.813	80.318	-44.891	1.00	24.72	A
	ATOM	5060	CB	GLU	A	642	59.945	79.622	-45.658	1.00	26.15	A
	ATOM	5061	CG	GLU	A	642	59.484	78.486	-46.562	1.00	27.49	A
55	ATOM	5062	CD	GLU	A	642	60.635	77.795	-47.278	1.00	29.77	A
	ATOM	5063	OE1	GLU	A	642	60.378	76.791	-47.977	1.00	30.73	A
	ATOM	5064	OE2	GLU	A	642	61.791	78.252	-47.144	1.00	30.00	A
	ATOM	5065	C	GLU	A	642	57.885	79.255	-44.303	1.00	24.21	A
	ATOM	5066	O	GLU	A	642	56.865	78.921	-44.903	1.00	24.08	A

5	ATOM	5067	N	HIS	A	643	58.223	78.728	-43.133	1.00	23.20	A
	ATOM	5068	CA	HIS	A	643	57.416	77.665	-42.538	1.00	22.09	A
	ATOM	5069	CB	HIS	A	643	58.345	76.582	-41.992	1.00	23.02	A
	ATOM	5070	CG	HIS	A	643	59.256	76.004	-43.029	1.00	24.08	A
	ATOM	5071	CD2	HIS	A	643	60.556	76.255	-43.312	1.00	24.46	A
	ATOM	5072	ND1	HIS	A	643	58.831	75.083	-43.961	1.00	25.14	A
	ATOM	5073	CE1	HIS	A	643	59.830	74.789	-44.774	1.00	25.08	A
	ATOM	5074	NE2	HIS	A	643	60.888	75.487	-44.402	1.00	24.83	A
10	ATOM	5075	C	HIS	A	643	56.420	78.078	-41.464	1.00	21.26	A
	ATOM	5076	O	HIS	A	643	55.944	77.238	-40.697	1.00	20.11	A
	ATOM	5077	N	THR	A	644	56.101	79.365	-41.411	1.00	20.08	A
	ATOM	5078	CA	THR	A	644	55.146	79.865	-40.435	1.00	20.00	A
15	ATOM	5079	CB	THR	A	644	55.805	80.877	-39.475	1.00	20.19	A
	ATOM	5080	OG1	THR	A	644	56.886	80.236	-38.782	1.00	19.60	A
	ATOM	5081	CG2	THR	A	644	54.791	81.395	-38.451	1.00	19.41	A
	ATOM	5082	C	THR	A	644	53.986	80.542	-41.162	1.00	20.34	A
20	ATOM	5083	O	THR	A	644	54.200	81.413	-42.009	1.00	20.31	A
	ATOM	5084	N	SER	A	645	52.765	80.121	-40.847	1.00	19.47	A
	ATOM	5085	CA	SER	A	645	51.576	80.702	-41.459	1.00	18.89	A
	ATOM	5086	CB	SER	A	645	50.636	79.604	-41.977	1.00	19.65	A
	ATOM	5087	OG	SER	A	645	50.103	78.821	-40.917	1.00	18.59	A
	ATOM	5088	C	SER	A	645	50.859	81.556	-40.420	1.00	18.42	A
25	ATOM	5089	O	SER	A	645	51.124	81.445	-39.217	1.00	17.35	A
	ATOM	5090	N	TYR	A	646	49.951	82.408	-40.882	1.00	17.29	A
	ATOM	5091	CA	TYR	A	646	49.211	83.278	-39.979	1.00	16.80	A
	ATOM	5092	CB	TYR	A	646	49.590	84.737	-40.243	1.00	17.06	A
30	ATOM	5093	CG	TYR	A	646	51.069	84.965	-40.045	1.00	17.26	A
	ATOM	5094	CD1	TYR	A	646	51.980	84.670	-41.059	1.00	17.65	A
	ATOM	5095	CE1	TYR	A	646	53.352	84.771	-40.843	1.00	17.99	A
	ATOM	5096	CD2	TYR	A	646	51.567	85.374	-38.811	1.00	17.57	A
	ATOM	5097	CE2	TYR	A	646	52.935	85.478	-38.584	1.00	17.55	A
	ATOM	5098	CZ	TYR	A	646	53.820	85.173	-39.602	1.00	17.60	A
35	ATOM	5099	OH	TYR	A	646	55.174	85.253	-39.373	1.00	18.18	A
	ATOM	5100	C	TYR	A	646	47.712	83.081	-40.097	1.00	16.23	A
	ATOM	5101	O	TYR	A	646	47.158	83.071	-41.194	1.00	16.02	A
	ATOM	5102	N	ALA	A	647	47.062	82.916	-38.951	1.00	15.52	A
40	ATOM	5103	CA	ALA	A	647	45.627	82.699	-38.906	1.00	15.34	A
	ATOM	5104	CB	ALA	A	647	45.219	82.251	-37.507	1.00	16.44	A
	ATOM	5105	C	ALA	A	647	44.837	83.939	-39.290	1.00	15.45	A
	ATOM	5106	O	ALA	A	647	45.273	85.066	-39.072	1.00	15.26	A
	ATOM	5107	N	SER	A	648	43.669	83.722	-39.877	1.00	16.15	A
	ATOM	5108	CA	SER	A	648	42.802	84.829	-40.232	1.00	16.33	A
45	ATOM	5109	CB	SER	A	648	41.952	84.479	-41.456	1.00	17.26	A
	ATOM	5110	OG	SER	A	648	41.126	83.360	-41.194	1.00	18.74	A
	ATOM	5111	C	SER	A	648	41.914	84.985	-39.005	1.00	16.21	A
	ATOM	5112	O	SER	A	648	41.754	84.037	-38.230	1.00	16.15	A
50	ATOM	5113	N	ASN	A	649	41.348	86.171	-38.815	1.00	15.76	A
	ATOM	5114	CA	ASN	A	649	40.481	86.413	-37.669	1.00	15.87	A
	ATOM	5115	CB	ASN	A	649	41.216	87.235	-36.605	1.00	15.87	A
	ATOM	5116	CG	ASN	A	649	42.396	86.491	-36.000	1.00	15.98	A
	ATOM	5117	OD1	ASN	A	649	42.250	85.747	-35.027	1.00	15.07	A
	ATOM	5118	ND2	ASN	A	649	43.573	86.684	-36.583	1.00	15.26	A
55	ATOM	5119	C	ASN	A	649	39.236	87.156	-38.126	1.00	16.17	A
	ATOM	5120	O	ASN	A	649	39.321	88.131	-38.877	1.00	15.97	A
	ATOM	5121	N	LEU	A	650	38.083	86.686	-37.666	1.00	16.93	A

5	ATOM	5122	CA	LEU	A	650	36.804	87.288	-38.020	1.00	17.30	A
	ATOM	5123	CB	LEU	A	650	36.025	86.353	-38.946	1.00	16.88	A
	ATOM	5124	CG	LEU	A	650	34.612	86.785	-39.340	1.00	17.13	A
	ATOM	5125	CD1	LEU	A	650	34.670	88.040	-40.202	1.00	17.16	A
	ATOM	5126	CD2	LEU	A	650	33.933	85.649	-40.091	1.00	16.83	A
	ATOM	5127	C	LEU	A	650	35.985	87.567	-36.768	1.00	18.02	A
	ATOM	5128	O	LEU	A	650	35.627	86.648	-36.025	1.00	17.29	A
10	ATOM	5129	N	LEU	A	651	35.687	88.842	-36.540	1.00	18.59	A
	ATOM	5130	CA	LEU	A	651	34.911	89.255	-35.380	1.00	19.22	A
	ATOM	5131	CB	LEU	A	651	35.512	90.534	-34.783	1.00	20.86	A
	ATOM	5132	CG	LEU	A	651	35.142	90.917	-33.345	1.00	21.95	A
	ATOM	5133	CD1	LEU	A	651	33.696	91.353	-33.262	1.00	23.51	A
15	ATOM	5134	CD2	LEU	A	651	35.403	89.734	-32.429	1.00	22.19	A
	ATOM	5135	C	LEU	A	651	33.473	89.500	-35.825	1.00	19.82	A
	ATOM	5136	O	LEU	A	651	33.191	90.449	-36.558	1.00	19.72	A
	ATOM	5137	N	LEU	A	652	32.565	88.639	-35.378	1.00	19.69	A
	ATOM	5138	CA	LEU	A	652	31.166	88.757	-35.755	1.00	19.98	A
20	ATOM	5139	CB	LEU	A	652	30.586	87.375	-36.052	1.00	19.30	A
	ATOM	5140	CG	LEU	A	652	31.315	86.605	-37.156	1.00	19.06	A
	ATOM	5141	CD1	LEU	A	652	30.723	85.206	-37.283	1.00	18.94	A
	ATOM	5142	CD2	LEU	A	652	31.207	87.368	-38.477	1.00	18.77	A
	ATOM	5143	C	LEU	A	652	30.320	89.449	-34.700	1.00	21.51	A
	ATOM	5144	O	LEU	A	652	30.212	88.988	-33.560	1.00	20.61	A
25	ATOM	5145	N	ARG	A	653	29.726	90.570	-35.094	1.00	22.71	A
	ATOM	5146	CA	ARG	A	653	28.865	91.332	-34.207	1.00	24.81	A
	ATOM	5147	CB	ARG	A	653	29.582	91.658	-32.901	1.00	25.37	A
	ATOM	5148	CG	ARG	A	653	30.646	92.727	-33.008	1.00	27.04	A
	ATOM	5149	CD	ARG	A	653	30.498	93.677	-31.839	1.00	29.21	A
30	ATOM	5150	NE	ARG	A	653	31.775	94.064	-31.261	1.00	30.48	A
	ATOM	5151	CZ	ARG	A	653	31.897	94.765	-30.141	1.00	31.74	A
	ATOM	5152	NH1	ARG	A	653	30.814	95.156	-29.482	1.00	32.11	A
	ATOM	5153	NH2	ARG	A	653	33.100	95.072	-29.678	1.00	32.44	A
	ATOM	5154	C	ARG	A	653	28.435	92.626	-34.868	1.00	25.66	A
35	ATOM	5155	O	ARG	A	653	29.062	93.087	-35.821	1.00	24.91	A
	ATOM	5156	N	LYS	A	654	27.360	93.207	-34.354	1.00	27.38	A
	ATOM	5157	CA	LYS	A	654	26.858	94.463	-34.879	1.00	29.48	A
	ATOM	5158	CB	LYS	A	654	25.366	94.605	-34.568	1.00	30.53	A
	ATOM	5159	CG	LYS	A	654	24.503	93.495	-35.159	1.00	32.00	A
40	ATOM	5160	CD	LYS	A	654	23.402	94.053	-36.050	1.00	33.77	A
	ATOM	5161	CE	LYS	A	654	23.983	94.797	-37.244	1.00	34.37	A
	ATOM	5162	NZ	LYS	A	654	22.917	95.372	-38.117	1.00	36.17	A
	ATOM	5163	C	LYS	A	654	27.645	95.580	-34.204	1.00	29.80	A
	ATOM	5164	O	LYS	A	654	28.156	95.405	-33.097	1.00	30.41	A
45	ATOM	5165	N	ASN	A	655	27.751	96.718	-34.878	1.00	30.31	A
	ATOM	5166	CA	ASN	A	655	28.470	97.865	-34.337	1.00	30.30	A
	ATOM	5167	CB	ASN	A	655	27.714	98.427	-33.134	1.00	32.65	A
	ATOM	5168	CG	ASN	A	655	26.223	98.526	-33.384	1.00	34.87	A
	ATOM	5169	OD1	ASN	A	655	25.784	99.111	-34.379	1.00	36.57	A
50	ATOM	5170	ND2	ASN	A	655	25.432	97.951	-32.482	1.00	35.70	A
	ATOM	5171	C	ASN	A	655	29.892	97.499	-33.920	1.00	29.09	A
	ATOM	5172	O	ASN	A	655	30.272	97.657	-32.760	1.00	28.95	A
	ATOM	5173	N	PRO	A	656	30.699	97.000	-34.867	1.00	28.12	A
55	ATOM	5174	CD	PRO	A	656	30.370	96.630	-36.257	1.00	27.68	A
	ATOM	5175	CA	PRO	A	656	32.076	96.627	-34.544	1.00	27.59	A
	ATOM	5176	CB	PRO	A	656	32.417	95.634	-35.643	1.00	27.64	A

5	ATOM	5177	CG	PRO	A	656	31.728	96.247	-36.827	1.00	27.46	A
	ATOM	5178	C	PRO	A	656	33.008	97.832	-34.570	1.00	27.27	A
	ATOM	5179	O	PRO	A	656	32.700	98.856	-35.180	1.00	26.04	A
	ATOM	5180	N	THR	A	657	34.143	97.700	-33.893	1.00	26.93	A
	ATOM	5181	CA	THR	A	657	35.152	98.748	-33.864	1.00	27.12	A
10	ATOM	5182	CB	THR	A	657	35.302	99.365	-32.455	1.00	27.52	A
	ATOM	5183	OG1	THR	A	657	35.484	98.324	-31.489	1.00	27.21	A
	ATOM	5184	CG2	THR	A	657	34.067	100.186	-32.099	1.00	27.48	A
	ATOM	5185	C	THR	A	657	36.462	98.090	-34.280	1.00	27.11	A
	ATOM	5186	O	THR	A	657	36.618	96.873	-34.158	1.00	27.18	A
15	ATOM	5187	N	SER	A	658	37.395	98.890	-34.779	1.00	26.83	A
	ATOM	5188	CA	SER	A	658	38.682	98.380	-35.229	1.00	26.73	A
	ATOM	5189	CB	SER	A	658	39.576	99.539	-35.671	1.00	26.98	A
	ATOM	5190	OG	SER	A	658	39.848	100.401	-34.581	1.00	27.98	A
	ATOM	5191	C	SER	A	658	39.401	97.559	-34.159	1.00	26.39	A
20	ATOM	5192	O	SER	A	658	39.191	97.753	-32.961	1.00	25.68	A
	ATOM	5193	N	LEU	A	659	40.246	96.639	-34.616	1.00	25.99	A
	ATOM	5194	CA	LEU	A	659	41.023	95.772	-33.739	1.00	25.88	A
	ATOM	5195	CB	LEU	A	659	40.381	94.383	-33.649	1.00	26.05	A
	ATOM	5196	CG	LEU	A	659	39.071	94.250	-32.868	1.00	25.86	A
25	ATOM	5197	CD1	LEU	A	659	38.453	92.874	-33.107	1.00	26.79	A
	ATOM	5198	CD2	LEU	A	659	39.342	94.466	-31.392	1.00	25.65	A
	ATOM	5199	C	LEU	A	659	42.437	95.640	-34.294	1.00	25.93	A
	ATOM	5200	O	LEU	A	659	42.758	94.663	-34.974	1.00	26.37	A
	ATOM	5201	N	PRO	A	660	43.297	96.635	-34.030	1.00	25.74	A
30	ATOM	5202	CD	PRO	A	660	43.052	97.866	-33.256	1.00	25.96	A
	ATOM	5203	CA	PRO	A	660	44.679	96.592	-34.520	1.00	25.77	A
	ATOM	5204	CB	PRO	A	660	45.195	97.994	-34.209	1.00	25.89	A
	ATOM	5205	CG	PRO	A	660	44.463	98.340	-32.952	1.00	25.60	A
	ATOM	5206	C	PRO	A	660	45.461	95.497	-33.793	1.00	25.59	A
35	ATOM	5207	O	PRO	A	660	45.154	95.169	-32.649	1.00	25.45	A
	ATOM	5208	N	LEU	A	661	46.469	94.938	-34.453	1.00	26.17	A
	ATOM	5209	CA	LEU	A	661	47.256	93.867	-33.846	1.00	26.47	A
	ATOM	5210	CB	LEU	A	661	46.827	92.522	-34.439	1.00	26.01	A
	ATOM	5211	CG	LEU	A	661	45.373	92.111	-34.197	1.00	25.85	A
40	ATOM	5212	CD1	LEU	A	661	45.053	90.850	-34.990	1.00	25.80	A
	ATOM	5213	CD2	LEU	A	661	45.148	91.885	-32.707	1.00	25.90	A
	ATOM	5214	C	LEU	A	661	48.764	94.046	-34.013	1.00	26.80	A
	ATOM	5215	O	LEU	A	661	49.495	93.076	-34.217	1.00	26.97	A
	ATOM	5216	N	GLY	A	662	49.228	95.287	-33.925	1.00	27.05	A
45	ATOM	5217	CA	GLY	A	662	50.649	95.549	-34.066	1.00	27.15	A
	ATOM	5218	C	GLY	A	662	51.246	95.016	-35.356	1.00	27.55	A
	ATOM	5219	O	GLY	A	662	50.791	95.355	-36.447	1.00	27.88	A
	ATOM	5220	N	GLN	A	663	52.260	94.165	-35.228	1.00	27.70	A
	ATOM	5221	CA	GLN	A	663	52.948	93.594	-36.383	1.00	27.75	A
50	ATOM	5222	CB	GLN	A	663	54.338	93.111	-35.972	1.00	29.23	A
	ATOM	5223	CG	GLN	A	663	55.162	94.123	-35.205	1.00	31.06	A
	ATOM	5224	CD	GLN	A	663	56.475	93.535	-34.733	1.00	31.96	A
	ATOM	5225	OE1	GLN	A	663	57.324	93.155	-35.544	1.00	32.29	A
	ATOM	5226	NE2	GLN	A	663	56.647	93.445	-33.418	1.00	31.97	A
55	ATOM	5227	C	GLN	A	663	52.227	92.434	-37.063	1.00	26.71	A
	ATOM	5228	O	GLN	A	663	52.634	92.003	-38.140	1.00	26.75	A
	ATOM	5229	N	TYR	A	664	51.168	91.923	-36.445	1.00	26.28	A
	ATOM	5230	CA	TYR	A	664	50.438	90.796	-37.020	1.00	25.87	A
	ATOM	5231	CB	TYR	A	664	49.138	90.557	-36.251	1.00	24.54	A

5	ATOM	5232	CG	TYR	A	664	48.551	89.181	-36.475	1.00	22.88	A
	ATOM	5233	CD1	TYR	A	664	49.145	88.047	-35.915	1.00	22.04	A
	ATOM	5234	CE1	TYR	A	664	48.608	86.775	-36.124	1.00	21.08	A
	ATOM	5235	CD2	TYR	A	664	47.407	89.010	-37.254	1.00	21.95	A
	ATOM	5236	CE2	TYR	A	664	46.866	87.748	-37.472	1.00	20.70	A
10	ATOM	5237	CZ	TYR	A	664	47.469	86.634	-36.904	1.00	21.25	A
	ATOM	5238	OH	TYR	A	664	46.923	85.387	-37.114	1.00	19.20	A
	ATOM	5239	C	TYR	A	664	50.146	91.023	-38.507	1.00	26.39	A
	ATOM	5240	O	TYR	A	664	49.503	92.002	-38.884	1.00	26.43	A
	ATOM	5241	N	PRO	A	665	50.618	90.104	-39.367	1.00	27.21	A
15	ATOM	5242	CD	PRO	A	665	51.335	88.902	-38.908	1.00	26.98	A
	ATOM	5243	CA	PRO	A	665	50.490	90.087	-40.830	1.00	27.74	A
	ATOM	5244	CB	PRO	A	665	51.064	88.722	-41.209	1.00	27.97	A
	ATOM	5245	CG	PRO	A	665	52.074	88.481	-40.153	1.00	27.69	A
	ATOM	5246	C	PRO	A	665	49.111	90.302	-41.455	1.00	28.39	A
20	ATOM	5247	O	PRO	A	665	48.996	90.999	-42.463	1.00	28.61	A
	ATOM	5248	N	GLU	A	666	48.071	89.703	-40.881	1.00	28.52	A
	ATOM	5249	CA	GLU	A	666	46.738	89.842	-41.461	1.00	28.27	A
	ATOM	5250	CB	GLU	A	666	46.116	88.464	-41.709	1.00	30.04	A
	ATOM	5251	CG	GLU	A	666	44.880	88.533	-42.593	1.00	33.21	A
25	ATOM	5252	CD	GLU	A	666	44.407	87.178	-43.071	1.00	34.36	A
	ATOM	5253	OE1	GLU	A	666	45.226	86.434	-43.652	1.00	36.02	A
	ATOM	5254	OE2	GLU	A	666	43.214	86.863	-42.876	1.00	34.72	A
	ATOM	5255	C	GLU	A	666	45.770	90.691	-40.651	1.00	27.30	A
	ATOM	5256	O	GLU	A	666	45.712	90.595	-39.425	1.00	26.86	A
30	ATOM	5257	N	ASP	A	667	45.003	91.515	-41.361	1.00	25.51	A
	ATOM	5258	CA	ASP	A	667	44.024	92.403	-40.741	1.00	24.38	A
	ATOM	5259	CB	ASP	A	667	43.629	93.518	-41.715	1.00	25.91	A
	ATOM	5260	CG	ASP	A	667	44.821	94.302	-42.220	1.00	27.61	A
	ATOM	5261	OD1	ASP	A	667	45.584	94.826	-41.382	1.00	28.24	A
35	ATOM	5262	OD2	ASP	A	667	44.993	94.393	-43.454	1.00	28.96	A
	ATOM	5263	C	ASP	A	667	42.765	91.654	-40.324	1.00	22.12	A
	ATOM	5264	O	ASP	A	667	42.275	90.789	-41.047	1.00	21.74	A
	ATOM	5265	N	VAL	A	668	42.239	91.999	-39.159	1.00	20.90	A
	ATOM	5266	CA	VAL	A	668	41.025	91.372	-38.662	1.00	20.03	A
40	ATOM	5267	CB	VAL	A	668	40.715	91.827	-37.221	1.00	19.83	A
	ATOM	5268	CG1	VAL	A	668	39.392	91.228	-36.754	1.00	19.61	A
	ATOM	5269	CG2	VAL	A	668	41.851	91.408	-36.291	1.00	19.72	A
	ATOM	5270	C	VAL	A	668	39.863	91.769	-39.565	1.00	20.16	A
	ATOM	5271	O	VAL	A	668	39.808	92.901	-40.053	1.00	19.96	A
45	ATOM	5272	N	LYS	A	669	38.948	90.831	-39.792	1.00	19.66	A
	ATOM	5273	CA	LYS	A	669	37.770	91.067	-40.623	1.00	20.28	A
	ATOM	5274	CB	LYS	A	669	37.615	89.935	-41.641	1.00	21.78	A
	ATOM	5275	CG	LYS	A	669	38.806	89.805	-42.586	1.00	25.50	A
	ATOM	5276	CD	LYS	A	669	38.919	88.405	-43.182	1.00	28.10	A
50	ATOM	5277	CE	LYS	A	669	40.207	88.254	-43.992	1.00	29.47	A
	ATOM	5278	NZ	LYS	A	669	40.464	86.846	-44.414	1.00	29.99	A
	ATOM	5279	C	LYS	A	669	36.547	91.131	-39.713	1.00	19.68	A
	ATOM	5280	O	LYS	A	669	36.546	90.538	-38.631	1.00	18.99	A
	ATOM	5281	N	PHE	A	670	35.513	91.851	-40.142	1.00	18.45	A
55	ATOM	5282	CA	PHE	A	670	34.303	91.984	-39.341	1.00	18.50	A
	ATOM	5283	CB	PHE	A	670	34.158	93.421	-38.824	1.00	18.47	A
	ATOM	5284	CG	PHE	A	670	35.344	93.907	-38.045	1.00	18.53	A
	ATOM	5285	CD1	PHE	A	670	36.476	94.382	-38.701	1.00	18.06	A
	ATOM	5286	CD2	PHE	A	670	35.345	93.859	-36.655	1.00	18.27	A

5	ATOM	5287	CE1	PHE	A	670	37.593	94.800	-37.981	1.00	18.42	A
	ATOM	5288	CE2	PHE	A	670	36.457	94.275	-35.928	1.00	19.20	A
	ATOM	5289	CZ	PHE	A	670	37.583	94.745	-36.593	1.00	18.35	A
	ATOM	5290	C	PHE	A	670	33.049	91.600	-40.121	1.00	18.27	A
	ATOM	5291	O	PHE	A	670	33.090	91.430	-41.339	1.00	18.35	A
10	ATOM	5292	N	GLY	A	671	31.937	91.460	-39.410	1.00	18.50	A
	ATOM	5293	CA	GLY	A	671	30.687	91.106	-40.059	1.00	18.15	A
	ATOM	5294	C	GLY	A	671	29.565	90.910	-39.062	1.00	18.46	A
	ATOM	5295	O	GLY	A	671	29.804	90.822	-37.858	1.00	17.12	A
	ATOM	5296	N	ASP	A	672	28.332	90.853	-39.553	1.00	18.63	A
15	ATOM	5297	CA	ASP	A	672	27.196	90.639	-38.671	1.00	19.58	A
	ATOM	5298	CB	ASP	A	672	25.873	90.951	-39.376	1.00	21.20	A
	ATOM	5299	CG	ASP	A	672	25.692	92.426	-39.673	1.00	22.59	A
	ATOM	5300	OD1	ASP	A	672	26.358	93.258	-39.024	1.00	24.13	A
	ATOM	5301	OD2	ASP	A	672	24.861	92.751	-40.547	1.00	23.78	A
20	ATOM	5302	C	ASP	A	672	27.189	89.173	-38.263	1.00	19.65	A
	ATOM	5303	O	ASP	A	672	27.695	88.318	-38.987	1.00	18.43	A
	ATOM	5304	N	PRO	A	673	26.618	88.865	-37.091	1.00	19.89	A
	ATOM	5305	CD	PRO	A	673	26.012	89.784	-36.111	1.00	20.15	A
	ATOM	5306	CA	PRO	A	673	26.557	87.480	-36.619	1.00	20.31	A
25	ATOM	5307	CB	PRO	A	673	25.659	87.580	-35.392	1.00	20.38	A
	ATOM	5308	CG	PRO	A	673	25.978	88.940	-34.859	1.00	20.50	A
	ATOM	5309	C	PRO	A	673	25.950	86.592	-37.705	1.00	20.50	A
	ATOM	5310	O	PRO	A	673	25.009	86.992	-38.392	1.00	19.86	A
	ATOM	5311	N	ARG	A	674	26.499	85.396	-37.870	1.00	20.93	A
30	ATOM	5312	CA	ARG	A	674	25.997	84.463	-38.871	1.00	21.72	A
	ATOM	5313	CB	ARG	A	674	26.445	84.881	-40.276	1.00	21.99	A
	ATOM	5314	CG	ARG	A	674	27.941	84.754	-40.537	1.00	22.77	A
	ATOM	5315	CD	ARG	A	674	28.221	84.804	-42.033	1.00	24.81	A
	ATOM	5316	NE	ARG	A	674	29.603	84.475	-42.369	1.00	26.31	A
35	ATOM	5317	CZ	ARG	A	674	30.609	85.343	-42.367	1.00	27.19	A
	ATOM	5318	NH1	ARG	A	674	30.399	86.614	-42.046	1.00	28.25	A
	ATOM	5319	NH2	ARG	A	674	31.828	84.939	-42.701	1.00	27.77	A
	ATOM	5320	C	ARG	A	674	26.516	83.065	-38.575	1.00	21.85	A
	ATOM	5321	O	ARG	A	674	27.503	82.903	-37.859	1.00	21.35	A
40	ATOM	5322	N	GLU	A	675	25.850	82.052	-39.120	1.00	22.23	A
	ATOM	5323	CA	GLU	A	675	26.294	80.688	-38.897	1.00	22.85	A
	ATOM	5324	CB	GLU	A	675	25.243	79.685	-39.378	1.00	24.28	A
	ATOM	5325	CG	GLU	A	675	23.886	79.863	-38.724	1.00	25.01	A
	ATOM	5326	CD	GLU	A	675	23.065	78.591	-38.738	1.00	27.02	A
45	ATOM	5327	OE1	GLU	A	675	23.076	77.884	-39.769	1.00	26.65	A
	ATOM	5328	OE2	GLU	A	675	22.403	78.305	-37.716	1.00	27.89	A
	ATOM	5329	C	GLU	A	675	27.593	80.480	-39.655	1.00	23.14	A
	ATOM	5330	O	GLU	A	675	27.812	81.081	-40.710	1.00	23.14	A
	ATOM	5331	N	ILE	A	676	28.467	79.644	-39.106	1.00	22.54	A
50	ATOM	5332	CA	ILE	A	676	29.740	79.375	-39.752	1.00	22.87	A
	ATOM	5333	CB	ILE	A	676	30.892	80.167	-39.105	1.00	24.28	A
	ATOM	5334	CG2	ILE	A	676	30.575	81.657	-39.112	1.00	25.64	A
	ATOM	5335	CG1	ILE	A	676	31.117	79.680	-37.677	1.00	24.43	A
	ATOM	5336	CD1	ILE	A	676	32.453	80.090	-37.106	1.00	26.48	A
55	ATOM	5337	C	ILE	A	676	30.086	77.901	-39.664	1.00	22.36	A
	ATOM	5338	O	ILE	A	676	29.569	77.174	-38.814	1.00	22.01	A
	ATOM	5339	N	SER	A	677	30.971	77.476	-40.555	1.00	21.98	A
	ATOM	5340	CA	SER	A	677	31.428	76.099	-40.606	1.00	22.60	A
	ATOM	5341	CB	SER	A	677	30.861	75.404	-41.845	1.00	22.88	A

5	ATOM	5342	OG	SER	A	677	31.340	74.077	-41.939	1.00	25.66	A
	ATOM	5343	C	SER	A	677	32.949	76.128	-40.673	1.00	22.27	A
	ATOM	5344	O	SER	A	677	33.528	77.004	-41.313	1.00	22.32	A
	ATOM	5345	N	LEU	A	678	33.594	75.178	-40.004	1.00	21.75	A
	ATOM	5346	CA	LEU	A	678	35.050	75.113	-39.997	1.00	21.96	A
10	ATOM	5347	CB	LEU	A	678	35.613	75.741	-38.718	1.00	22.31	A
	ATOM	5348	CG	LEU	A	678	35.622	77.264	-38.562	1.00	22.76	A
	ATOM	5349	CD1	LEU	A	678	36.046	77.627	-37.146	1.00	22.99	A
	ATOM	5350	CD2	LEU	A	678	36.579	77.875	-39.567	1.00	23.14	A
	ATOM	5351	C	LEU	A	678	35.551	73.681	-40.091	1.00	22.13	A
15	ATOM	5352	O	LEU	A	678	34.892	72.748	-39.624	1.00	21.03	A
	ATOM	5353	N	ARG	A	679	36.723	73.524	-40.695	1.00	22.18	A
	ATOM	5354	CA	ARG	A	679	37.347	72.218	-40.834	1.00	23.61	A
	ATOM	5355	CB	ARG	A	679	36.904	71.530	-42.127	1.00	24.89	A
	ATOM	5356	CG	ARG	A	679	37.397	70.095	-42.210	1.00	27.40	A
20	ATOM	5357	CD	ARG	A	679	37.123	69.453	-43.555	1.00	29.86	A
	ATOM	5358	NE	ARG	A	679	37.544	68.055	-43.546	1.00	32.30	A
	ATOM	5359	CZ	ARG	A	679	37.557	67.266	-44.615	1.00	33.42	A
	ATOM	5360	NH1	ARG	A	679	37.172	67.736	-45.795	1.00	34.22	A
	ATOM	5361	NH2	ARG	A	679	37.958	66.007	-44.502	1.00	34.11	A
25	ATOM	5362	C	ARG	A	679	38.866	72.346	-40.837	1.00	23.38	A
	ATOM	5363	O	ARG	A	679	39.440	73.049	-41.672	1.00	23.17	A
	ATOM	5364	N	VAL	A	680	39.514	71.672	-39.893	1.00	22.77	A
	ATOM	5365	CA	VAL	A	680	40.967	71.692	-39.809	1.00	22.34	A
	ATOM	5366	CB	VAL	A	680	41.439	71.950	-38.366	1.00	22.26	A
30	ATOM	5367	CG1	VAL	A	680	42.954	71.866	-38.292	1.00	21.52	A
	ATOM	5368	CG2	VAL	A	680	40.960	73.325	-37.906	1.00	21.17	A
	ATOM	5369	C	VAL	A	680	41.500	70.342	-40.281	1.00	23.12	A
	ATOM	5370	O	VAL	A	680	41.005	69.293	-39.866	1.00	22.47	A
	ATOM	5371	N	GLY	A	681	42.505	70.377	-41.152	1.00	24.09	A
35	ATOM	5372	CA	GLY	A	681	43.078	69.149	-41.673	1.00	25.82	A
	ATOM	5373	C	GLY	A	681	42.009	68.272	-42.298	1.00	27.00	A
	ATOM	5374	O	GLY	A	681	41.084	68.773	-42.939	1.00	26.66	A
	ATOM	5375	N	ASN	A	682	42.130	66.962	-42.113	1.00	28.40	A
	ATOM	5376	CA	ASN	A	682	41.152	66.024	-42.654	1.00	30.08	A
40	ATOM	5377	CB	ASN	A	682	41.848	64.786	-43.220	1.00	32.01	A
	ATOM	5378	CG	ASN	A	682	42.620	65.080	-44.491	1.00	34.27	A
	ATOM	5379	OD1	ASN	A	682	43.168	64.173	-45.116	1.00	36.87	A
	ATOM	5380	ND2	ASN	A	682	42.666	66.349	-44.882	1.00	35.56	A
	ATOM	5381	C	ASN	A	682	40.186	65.605	-41.556	1.00	29.67	A
45	ATOM	5382	O	ASN	A	682	39.448	64.632	-41.702	1.00	30.68	A
	ATOM	5383	N	GLY	A	683	40.199	66.353	-40.456	1.00	28.63	A
	ATOM	5384	CA	GLY	A	683	39.329	66.050	-39.336	1.00	27.13	A
	ATOM	5385	C	GLY	A	683	37.867	66.320	-39.622	1.00	25.71	A
	ATOM	5386	O	GLY	A	683	37.476	66.450	-40.782	1.00	25.68	A
50	ATOM	5387	N	PRO	A	684	37.027	66.410	-38.578	1.00	24.04	A
	ATOM	5388	CD	PRO	A	684	37.354	66.244	-37.150	1.00	24.02	A
	ATOM	5389	CA	PRO	A	684	35.597	66.667	-38.759	1.00	23.26	A
	ATOM	5390	CB	PRO	A	684	35.014	66.321	-37.394	1.00	23.35	A
	ATOM	5391	CG	PRO	A	684	36.104	66.763	-36.462	1.00	24.03	A
55	ATOM	5392	C	PRO	A	684	35.298	68.108	-39.159	1.00	22.03	A
	ATOM	5393	O	PRO	A	684	36.136	68.996	-39.004	1.00	21.92	A
	ATOM	5394	N	THR	A	685	34.103	68.322	-39.694	1.00	21.27	A
	ATOM	5395	CA	THR	A	685	33.661	69.653	-40.091	1.00	20.07	A
	ATOM	5396	CB	THR	A	685	33.047	69.649	-41.506	1.00	19.84	A

5	ATOM	5397	OG1	THR	A	685	34.051	69.284	-42.458	1.00	19.96	A
	ATOM	5398	CG2	THR	A	685	32.495	71.029	-41.855	1.00	19.80	A
	ATOM	5399	C	THR	A	685	32.596	70.041	-39.078	1.00	19.41	A
	ATOM	5400	O	THR	A	685	31.600	69.336	-38.918	1.00	19.79	A
	ATOM	5401	N	LEU	A	686	32.811	71.156	-38.388	1.00	18.82	A
10	ATOM	5402	CA	LEU	A	686	31.872	71.612	-37.375	1.00	18.60	A
	ATOM	5403	CB	LEU	A	686	32.606	71.908	-36.061	1.00	18.99	A
	ATOM	5404	CG	LEU	A	686	33.539	70.849	-35.466	1.00	20.30	A
	ATOM	5405	CD1	LEU	A	686	33.969	71.304	-34.072	1.00	19.83	A
	ATOM	5406	CD2	LEU	A	686	32.849	69.497	-35.393	1.00	20.32	A
15	ATOM	5407	C	LEU	A	686	31.109	72.856	-37.807	1.00	18.14	A
	ATOM	5408	O	LEU	A	686	31.679	73.775	-38.397	1.00	17.46	A
	ATOM	5409	N	ALA	A	687	29.815	72.871	-37.505	1.00	17.55	A
	ATOM	5410	CA	ALA	A	687	28.956	73.998	-37.841	1.00	18.33	A
	ATOM	5411	CB	ALA	A	687	27.759	73.526	-38.658	1.00	18.09	A
20	ATOM	5412	C	ALA	A	687	28.483	74.653	-36.552	1.00	18.18	A
	ATOM	5413	O	ALA	A	687	28.116	73.966	-35.596	1.00	18.07	A
	ATOM	5414	N	PHE	A	688	28.488	75.981	-36.536	1.00	17.57	A
	ATOM	5415	CA	PHE	A	688	28.073	76.741	-35.365	1.00	16.78	A
	ATOM	5416	CB	PHE	A	688	29.242	77.575	-34.830	1.00	16.30	A
25	ATOM	5417	CG	PHE	A	688	30.477	76.778	-34.526	1.00	15.14	A
	ATOM	5418	CD1	PHE	A	688	31.286	76.298	-35.552	1.00	14.69	A
	ATOM	5419	CD2	PHE	A	688	30.837	76.513	-33.208	1.00	15.04	A
	ATOM	5420	CE1	PHE	A	688	32.437	75.567	-35.271	1.00	14.91	A
	ATOM	5421	CE2	PHE	A	688	31.986	75.783	-32.915	1.00	14.60	A
30	ATOM	5422	CZ	PHE	A	688	32.788	75.309	-33.948	1.00	14.65	A
	ATOM	5423	C	PHE	A	688	26.921	77.683	-35.689	1.00	17.40	A
	ATOM	5424	O	PHE	A	688	26.760	78.119	-36.830	1.00	18.04	A
	ATOM	5425	N	SER	A	689	26.129	78.002	-34.674	1.00	17.46	A
	ATOM	5426	CA	SER	A	689	25.006	78.916	-34.837	1.00	18.27	A
35	ATOM	5427	CB	SER	A	689	24.012	78.745	-33.689	1.00	17.90	A
	ATOM	5428	OG	SER	A	689	24.564	79.219	-32.473	1.00	17.73	A
	ATOM	5429	C	SER	A	689	25.574	80.334	-34.815	1.00	18.53	A
	ATOM	5430	O	SER	A	689	26.765	80.525	-34.561	1.00	17.93	A
	ATOM	5431	N	GLU	A	690	24.729	81.326	-35.077	1.00	19.26	A
40	ATOM	5432	CA	GLU	A	690	25.188	82.709	-35.077	1.00	20.14	A
	ATOM	5433	CB	GLU	A	690	24.130	83.629	-35.697	1.00	22.21	A
	ATOM	5434	CG	GLU	A	690	22.856	83.773	-34.890	1.00	24.08	A
	ATOM	5435	CD	GLU	A	690	21.919	84.806	-35.489	1.00	26.32	A
	ATOM	5436	OE1	GLU	A	690	21.439	84.588	-36.623	1.00	26.83	A
45	ATOM	5437	OE2	GLU	A	690	21.670	85.838	-34.829	1.00	28.62	A
	ATOM	5438	C	GLU	A	690	25.539	83.188	-33.669	1.00	19.89	A
	ATOM	5439	O	GLU	A	690	26.028	84.304	-33.490	1.00	19.45	A
	ATOM	5440	N	GLN	A	691	25.279	82.347	-32.672	1.00	19.85	A
	ATOM	5441	CA	GLN	A	691	25.611	82.677	-31.289	1.00	20.01	A
50	ATOM	5442	CB	GLN	A	691	24.519	82.182	-30.340	1.00	22.21	A
	ATOM	5443	CG	GLN	A	691	23.204	82.921	-30.479	1.00	25.23	A
	ATOM	5444	CD	GLN	A	691	22.014	81.998	-30.363	1.00	27.55	A
	ATOM	5445	OE1	GLN	A	691	21.813	81.345	-29.336	1.00	28.65	A
	ATOM	5446	NE2	GLN	A	691	21.215	81.934	-31.423	1.00	29.19	A
55	ATOM	5447	C	GLN	A	691	26.948	82.025	-30.925	1.00	19.08	A
	ATOM	5448	O	GLN	A	691	27.359	82.030	-29.766	1.00	19.03	A
	ATOM	5449	N	GLY	A	692	27.615	81.457	-31.925	1.00	18.05	A
	ATOM	5450	CA	GLY	A	692	28.907	80.828	-31.702	1.00	17.80	A
	ATOM	5451	C	GLY	A	692	28.877	79.489	-30.986	1.00	17.67	A

5	ATOM	5452	O	GLY	A	692	29.878	79.067	-30.409	1.00	18.07	A
	ATOM	5453	N	LEU	A	693	27.735	78.813	-31.024	1.00	17.63	A
	ATOM	5454	CA	LEU	A	693	27.601	77.515	-30.368	1.00	17.63	A
	ATOM	5455	CB	LEU	A	693	26.369	77.518	-29.462	1.00	19.17	A
	ATOM	5456	CG	LEU	A	693	26.470	78.433	-28.239	1.00	20.12	A
	ATOM	5457	CD1	LEU	A	693	25.076	78.780	-27.735	1.00	22.01	A
10	ATOM	5458	CD2	LEU	A	693	27.290	77.755	-27.158	1.00	20.87	A
	ATOM	5459	C	LEU	A	693	27.503	76.373	-31.367	1.00	17.45	A
	ATOM	5460	O	LEU	A	693	26.901	76.511	-32.435	1.00	16.57	A
	ATOM	5461	N	LEU	A	694	28.095	75.238	-31.008	1.00	17.12	A
	ATOM	5462	CA	LEU	A	694	28.085	74.060	-31.866	1.00	17.42	A
	ATOM	5463	CB	LEU	A	694	28.785	72.893	-31.164	1.00	17.16	A
15	ATOM	5464	CG	LEU	A	694	28.960	71.618	-31.993	1.00	16.87	A
	ATOM	5465	CD1	LEU	A	694	29.935	71.876	-33.132	1.00	16.72	A
	ATOM	5466	CD2	LEU	A	694	29.480	70.495	-31.097	1.00	16.91	A
	ATOM	5467	C	LEU	A	694	26.658	73.659	-32.223	1.00	17.52	A
	ATOM	5468	O	LEU	A	694	25.764	73.707	-31.380	1.00	16.45	A
	ATOM	5469	N	LYS	A	695	26.458	73.264	-33.478	1.00	18.82	A
20	ATOM	5470	CA	LYS	A	695	25.147	72.847	-33.961	1.00	20.55	A
	ATOM	5471	CB	LYS	A	695	24.614	73.868	-34.971	1.00	22.63	A
	ATOM	5472	CG	LYS	A	695	23.347	73.447	-35.697	1.00	26.75	A
	ATOM	5473	CD	LYS	A	695	22.670	74.641	-36.378	1.00	29.24	A
	ATOM	5474	CE	LYS	A	695	22.138	75.631	-35.345	1.00	30.84	A
	ATOM	5475	NZ	LYS	A	695	21.443	76.797	-35.961	1.00	32.11	A
25	ATOM	5476	C	LYS	A	695	25.197	71.466	-34.602	1.00	20.01	A
	ATOM	5477	O	LYS	A	695	24.230	70.710	-34.527	1.00	20.35	A
	ATOM	5478	N	SER	A	696	26.323	71.136	-35.230	1.00	19.98	A
	ATOM	5479	CA	SER	A	696	26.470	69.838	-35.882	1.00	19.65	A
	ATOM	5480	CB	SER	A	696	25.755	69.844	-37.238	1.00	19.79	A
	ATOM	5481	OG	SER	A	696	26.472	70.618	-38.188	1.00	19.06	A
30	ATOM	5482	C	SER	A	696	27.926	69.450	-36.095	1.00	19.73	A
	ATOM	5483	O	SER	A	696	28.813	70.308	-36.131	1.00	19.51	A
	ATOM	5484	N	ILE	A	697	28.157	68.148	-36.243	1.00	18.94	A
	ATOM	5485	CA	ILE	A	697	29.488	67.599	-36.476	1.00	19.29	A
	ATOM	5486	CB	ILE	A	697	30.004	66.795	-35.257	1.00	18.22	A
	ATOM	5487	CG2	ILE	A	697	31.349	66.159	-35.584	1.00	17.95	A
35	ATOM	5488	CG1	ILE	A	697	30.130	67.701	-34.032	1.00	17.15	A
	ATOM	5489	CD1	ILE	A	697	30.598	66.968	-32.782	1.00	16.28	A
	ATOM	5490	C	ILE	A	697	29.435	66.633	-37.660	1.00	20.96	A
	ATOM	5491	O	ILE	A	697	28.591	65.734	-37.694	1.00	21.08	A
	ATOM	5492	N	GLN	A	698	30.325	66.825	-38.627	1.00	22.27	A
	ATOM	5493	CA	GLN	A	698	30.396	65.943	-39.786	1.00	23.77	A
40	ATOM	5494	CB	GLN	A	698	30.292	66.730	-41.096	1.00	24.36	A
	ATOM	5495	CG	GLN	A	698	29.972	65.833	-42.291	1.00	25.87	A
	ATOM	5496	CD	GLN	A	698	30.216	66.504	-43.631	1.00	27.18	A
	ATOM	5497	OE1	GLN	A	698	29.671	66.083	-44.654	1.00	28.35	A
	ATOM	5498	NE2	GLN	A	698	31.046	67.538	-43.635	1.00	27.17	A
	ATOM	5499	C	GLN	A	698	31.743	65.235	-39.725	1.00	24.33	A
45	ATOM	5500	O	GLN	A	698	32.788	65.850	-39.951	1.00	24.42	A
	ATOM	5501	N	LEU	A	699	31.719	63.940	-39.423	1.00	25.41	A
	ATOM	5502	CA	LEU	A	699	32.944	63.160	-39.301	1.00	26.65	A
	ATOM	5503	CB	LEU	A	699	32.615	61.743	-38.821	1.00	26.18	A
	ATOM	5504	CG	LEU	A	699	31.898	61.659	-37.467	1.00	25.56	A
	ATOM	5505	CD1	LEU	A	699	31.704	60.203	-37.076	1.00	24.95	A
55	ATOM	5506	CD2	LEU	A	699	32.713	62.387	-36.410	1.00	25.37	A

	ATOM	5507	C	LEU	A	699	33.785	63.095	-40.569	1.00	28.22	A
	ATOM	5508	O	LEU	A	699	35.008	63.219	-40.514	1.00	28.15	A
	ATOM	5509	N	THR	A	700	33.137	62.895	-41.711	1.00	30.08	A
5	ATOM	5510	CA	THR	A	700	33.853	62.820	-42.979	1.00	32.39	A
	ATOM	5511	CB	THR	A	700	33.986	61.360	-43.462	1.00	32.28	A
	ATOM	5512	OG1	THR	A	700	32.682	60.798	-43.660	1.00	32.31	A
	ATOM	5513	CG2	THR	A	700	34.740	60.531	-42.438	1.00	31.92	A
	ATOM	5514	C	THR	A	700	33.123	63.625	-44.045	1.00	33.91	A
10	ATOM	5515	O	THR	A	700	31.955	63.968	-43.878	1.00	33.85	A
	ATOM	5516	N	GLN	A	701	33.816	63.927	-45.137	1.00	36.39	A
	ATOM	5517	CA	GLN	A	701	33.222	64.698	-46.224	1.00	38.80	A
	ATOM	5518	CB	GLN	A	701	34.245	64.908	-47.342	1.00	39.86	A
	ATOM	5519	CG	GLN	A	701	35.569	65.462	-46.860	1.00	41.67	A
15	ATOM	5520	CD	GLN	A	701	36.454	65.926	-47.998	1.00	42.85	A
	ATOM	5521	OE1	GLN	A	701	36.088	66.830	-48.753	1.00	43.40	A
	ATOM	5522	NE2	GLN	A	701	37.628	65.313	-48.129	1.00	43.29	A
	ATOM	5523	C	GLN	A	701	31.997	63.987	-46.782	1.00	39.49	A
	ATOM	5524	O	GLN	A	701	31.102	64.617	-47.343	1.00	40.50	A
20	ATOM	5525	N	ASP	A	702	31.962	62.669	-46.615	1.00	40.44	A
	ATOM	5526	CA	ASP	A	702	30.854	61.856	-47.101	1.00	41.22	A
	ATOM	5527	CB	ASP	A	702	31.325	60.416	-47.314	1.00	42.70	A
	ATOM	5528	CG	ASP	A	702	32.717	60.341	-47.909	1.00	43.88	A
	ATOM	5529	OD1	ASP	A	702	32.906	60.804	-49.056	1.00	44.15	A
25	ATOM	5530	OD2	ASP	A	702	33.624	59.822	-47.221	1.00	44.63	A
	ATOM	5531	C	ASP	A	702	29.698	61.859	-46.105	1.00	40.87	A
	ATOM	5532	O	ASP	A	702	28.556	62.159	-46.457	1.00	41.18	A
	ATOM	5533	N	SER	A	703	30.014	61.520	-44.859	1.00	39.98	A
	ATOM	5534	CA	SER	A	703	29.029	61.452	-43.786	1.00	38.58	A
30	ATOM	5535	CB	SER	A	703	29.739	61.217	-42.450	1.00	38.76	A
	ATOM	5536	OG	SER	A	703	30.659	62.258	-42.172	1.00	37.91	A
	ATOM	5537	C	SER	A	703	28.147	62.693	-43.683	1.00	37.58	A
	ATOM	5538	O	SER	A	703	28.471	63.751	-44.224	1.00	37.44	A
	ATOM	5539	N	PRO	A	704	27.009	62.572	-42.983	1.00	36.57	A
35	ATOM	5540	CD	PRO	A	704	26.426	61.309	-42.488	1.00	36.72	A
	ATOM	5541	CA	PRO	A	704	26.068	63.677	-42.798	1.00	35.60	A
	ATOM	5542	CB	PRO	A	704	24.751	62.956	-42.571	1.00	36.25	A
	ATOM	5543	CG	PRO	A	704	25.184	61.784	-41.753	1.00	36.32	A
	ATOM	5544	C	PRO	A	704	26.434	64.571	-41.616	1.00	34.44	A
40	ATOM	5545	O	PRO	A	704	27.327	64.250	-40.832	1.00	33.95	A
	ATOM	5546	N	HIS	A	705	25.730	65.693	-41.502	1.00	32.79	A
	ATOM	5547	CA	HIS	A	705	25.946	66.640	-40.416	1.00	30.84	A
	ATOM	5548	CB	HIS	A	705	25.500	68.041	-40.839	1.00	31.81	A
	ATOM	5549	CG	HIS	A	705	26.333	68.634	-41.932	1.00	33.35	A
45	ATOM	5550	CD2	HIS	A	705	26.029	68.952	-43.212	1.00	34.15	A
	ATOM	5551	ND1	HIS	A	705	27.664	68.951	-41.764	1.00	33.69	A
	ATOM	5552	CE1	HIS	A	705	28.145	69.437	-42.894	1.00	33.97	A
	ATOM	5553	NE2	HIS	A	705	27.173	69.448	-43.789	1.00	34.80	A
	ATOM	5554	C	HIS	A	705	25.136	66.186	-39.209	1.00	28.81	A
50	ATOM	5555	O	HIS	A	705	23.952	66.491	-39.096	1.00	28.15	A
	ATOM	5556	N	VAL	A	706	25.781	65.452	-38.310	1.00	26.49	A
	ATOM	5557	CA	VAL	A	706	25.109	64.950	-37.120	1.00	24.60	A
	ATOM	5558	CB	VAL	A	706	25.994	63.920	-36.384	1.00	23.73	A
	ATOM	5559	CG1	VAL	A	706	25.276	63.404	-35.148	1.00	23.27	A
	ATOM	5560	CG2	VAL	A	706	26.335	62.774	-37.320	1.00	23.50	A
55	ATOM	5561	C	VAL	A	706	24.757	66.075	-36.154	1.00	23.78	A

5	ATOM	5562	O	VAL	A	706	25.622	66.845	-35.745	1.00	23.66	A
	ATOM	5563	N	PRO	A	707	23.473	66.187	-35.780	1.00	23.08	A
	ATOM	5564	CD	PRO	A	707	22.320	65.469	-36.351	1.00	23.24	A
	ATOM	5565	CA	PRO	A	707	23.025	67.229	-34.853	1.00	22.31	A
	ATOM	5566	CB	PRO	A	707	21.507	67.042	-34.831	1.00	22.67	A
	ATOM	5567	CG	PRO	A	707	21.213	66.478	-36.188	1.00	22.98	A
	ATOM	5568	C	PRO	A	707	23.635	67.086	-33.456	1.00	21.45	A
	ATOM	5569	O	PRO	A	707	23.396	66.099	-32.761	1.00	21.52	A
10	ATOM	5570	N	VAL	A	708	24.433	68.073	-33.063	1.00	20.14	A
	ATOM	5571	CA	VAL	A	708	25.070	68.102	-31.748	1.00	18.90	A
	ATOM	5572	CB	VAL	A	708	26.532	67.600	-31.807	1.00	18.48	A
	ATOM	5573	CG1	VAL	A	708	27.171	67.679	-30.422	1.00	17.73	A
15	ATOM	5574	CG2	VAL	A	708	26.569	66.170	-32.319	1.00	17.97	A
	ATOM	5575	C	VAL	A	708	25.046	69.571	-31.349	1.00	19.08	A
	ATOM	5576	O	VAL	A	708	25.819	70.374	-31.863	1.00	18.79	A
	ATOM	5577	N	HIS	A	709	24.142	69.922	-30.445	1.00	19.13	A
20	ATOM	5578	CA	HIS	A	709	24.001	71.310	-30.030	1.00	19.46	A
	ATOM	5579	CB	HIS	A	709	22.541	71.758	-30.180	1.00	21.51	A
	ATOM	5580	CG	HIS	A	709	22.012	71.661	-31.577	1.00	24.16	A
	ATOM	5581	CD2	HIS	A	709	21.797	70.590	-32.378	1.00	25.73	A
	ATOM	5582	ND1	HIS	A	709	21.600	72.764	-32.295	1.00	26.33	A
	ATOM	5583	CE1	HIS	A	709	21.152	72.377	-33.477	1.00	26.24	A
	ATOM	5584	NE2	HIS	A	709	21.261	71.062	-33.552	1.00	25.69	A
	ATOM	5585	C	HIS	A	709	24.441	71.580	-28.602	1.00	18.62	A
25	ATOM	5586	O	HIS	A	709	24.065	70.857	-27.679	1.00	18.91	A
	ATOM	5587	N	PHE	A	710	25.244	72.626	-28.435	1.00	17.43	A
	ATOM	5588	CA	PHE	A	710	25.705	73.045	-27.120	1.00	16.63	A
	ATOM	5589	CB	PHE	A	710	27.123	73.623	-27.195	1.00	16.26	A
30	ATOM	5590	CG	PHE	A	710	28.204	72.681	-26.716	1.00	16.17	A
	ATOM	5591	CD1	PHE	A	710	29.374	72.517	-27.451	1.00	16.64	A
	ATOM	5592	CD2	PHE	A	710	28.069	71.994	-25.512	1.00	16.37	A
	ATOM	5593	CE1	PHE	A	710	30.398	71.682	-26.994	1.00	16.33	A
	ATOM	5594	CE2	PHE	A	710	29.086	71.157	-25.046	1.00	16.04	A
	ATOM	5595	CZ	PHE	A	710	30.251	71.003	-25.790	1.00	16.18	A
35	ATOM	5596	C	PHE	A	710	24.730	74.130	-26.678	1.00	17.27	A
	ATOM	5597	O	PHE	A	710	24.296	74.963	-27.487	1.00	16.24	A
	ATOM	5598	N	LYS	A	711	24.380	74.114	-25.399	1.00	16.58	A
	ATOM	5599	CA	LYS	A	711	23.453	75.089	-24.854	1.00	18.02	A
40	ATOM	5600	CB	LYS	A	711	22.016	74.577	-25.000	1.00	19.78	A
	ATOM	5601	CG	LYS	A	711	20.960	75.492	-24.411	1.00	22.47	A
	ATOM	5602	CD	LYS	A	711	19.566	74.874	-24.524	1.00	24.01	A
	ATOM	5603	CE	LYS	A	711	19.132	74.717	-25.973	1.00	24.28	A
	ATOM	5604	NZ	LYS	A	711	17.796	74.059	-26.070	1.00	26.13	A
45	ATOM	5605	C	LYS	A	711	23.776	75.309	-23.384	1.00	17.48	A
	ATOM	5606	O	LYS	A	711	24.155	74.372	-22.681	1.00	17.60	A
	ATOM	5607	N	PHE	A	712	23.636	76.546	-22.926	1.00	16.29	A
50	ATOM	5608	CA	PHE	A	712	23.898	76.862	-21.532	1.00	15.83	A
	ATOM	5609	CB	PHE	A	712	24.890	78.028	-21.413	1.00	15.72	A
	ATOM	5610	CG	PHE	A	712	26.312	77.644	-21.718	1.00	15.16	A
	ATOM	5611	CD1	PHE	A	712	26.800	77.689	-23.020	1.00	14.61	A
	ATOM	5612	CD2	PHE	A	712	27.149	77.191	-20.703	1.00	14.74	A
	ATOM	5613	CE1	PHE	A	712	28.103	77.286	-23.308	1.00	14.86	A
	ATOM	5614	CE2	PHE	A	712	28.453	76.785	-20.977	1.00	14.53	A
	ATOM	5615	CZ	PHE	A	712	28.932	76.831	-22.282	1.00	14.63	A
55	ATOM	5616	C	PHE	A	712	22.590	77.209	-20.845	1.00	15.49	A

5	ATOM	5617	O	PHE	A	712	21.801	78.000	-21.361	1.00	15.25	A
	ATOM	5618	N	LEU	A	713	22.347	76.594	-19.693	1.00	15.13	A
	ATOM	5619	CA	LEU	A	713	21.122	76.853	-18.949	1.00	15.92	A
	ATOM	5620	CB	LEU	A	713	20.165	75.654	-19.040	1.00	15.54	A
	ATOM	5621	CG	LEU	A	713	19.731	75.215	-20.442	1.00	16.03	A
10	ATOM	5622	CD1	LEU	A	713	20.687	74.147	-20.966	1.00	16.71	A
	ATOM	5623	CD2	LEU	A	713	18.310	74.655	-20.398	1.00	15.98	A
	ATOM	5624	C	LEU	A	713	21.452	77.150	-17.495	1.00	16.60	A
	ATOM	5625	O	LEU	A	713	22.615	77.106	-17.092	1.00	16.74	A
	ATOM	5626	N	LYS	A	714	20.432	77.469	-16.709	1.00	16.73	A
15	ATOM	5627	CA	LYS	A	714	20.648	77.766	-15.307	1.00	17.78	A
	ATOM	5628	CB	LYS	A	714	20.707	79.282	-15.083	1.00	20.35	A
	ATOM	5629	CG	LYS	A	714	19.521	80.049	-15.640	1.00	23.01	A
	ATOM	5630	CD	LYS	A	714	19.545	81.517	-15.208	1.00	25.87	A
	ATOM	5631	CE	LYS	A	714	20.797	82.237	-15.693	1.00	27.66	A
20	ATOM	5632	NZ	LYS	A	714	20.843	83.662	-15.245	1.00	29.31	A
	ATOM	5633	C	LYS	A	714	19.585	77.162	-14.405	1.00	17.94	A
	ATOM	5634	O	LYS	A	714	18.399	77.120	-14.752	1.00	17.86	A
	ATOM	5635	N	TYR	A	715	20.034	76.668	-13.255	1.00	17.22	A
	ATOM	5636	CA	TYR	A	715	19.153	76.093	-12.253	1.00	16.49	A
25	ATOM	5637	CB	TYR	A	715	19.738	74.804	-11.658	1.00	15.95	A
	ATOM	5638	CG	TYR	A	715	19.644	73.582	-12.540	1.00	14.81	A
	ATOM	5639	CD1	TYR	A	715	20.718	73.182	-13.334	1.00	15.39	A
	ATOM	5640	CE1	TYR	A	715	20.634	72.037	-14.142	1.00	14.36	A
	ATOM	5641	CD2	TYR	A	715	18.479	72.815	-12.572	1.00	14.77	A
30	ATOM	5642	CE2	TYR	A	715	18.383	71.679	-13.372	1.00	14.23	A
	ATOM	5643	CZ	TYR	A	715	19.459	71.294	-14.151	1.00	14.55	A
	ATOM	5644	OH	TYR	A	715	19.356	70.167	-14.936	1.00	13.86	A
	ATOM	5645	C	TYR	A	715	19.068	77.128	-11.145	1.00	17.13	A
	ATOM	5646	O	TYR	A	715	20.021	77.874	-10.916	1.00	17.00	A
35	ATOM	5647	N	GLY	A	716	17.936	77.170	-10.455	1.00	17.07	A
	ATOM	5648	CA	GLY	A	716	17.783	78.116	-9.368	1.00	16.98	A
	ATOM	5649	C	GLY	A	716	17.685	77.390	-8.040	1.00	17.56	A
	ATOM	5650	O	GLY	A	716	18.003	76.200	-7.943	1.00	17.72	A
	ATOM	5651	N	VAL	A	717	17.253	78.108	-7.012	1.00	17.71	A
40	ATOM	5652	CA	VAL	A	717	17.099	77.536	-5.683	1.00	18.46	A
	ATOM	5653	CB	VAL	A	717	18.017	78.246	-4.671	1.00	18.67	A
	ATOM	5654	CG1	VAL	A	717	17.805	77.675	-3.284	1.00	20.04	A
	ATOM	5655	CG2	VAL	A	717	19.478	78.078	-5.094	1.00	18.36	A
	ATOM	5656	C	VAL	A	717	15.643	77.684	-5.253	1.00	19.21	A
45	ATOM	5657	O	VAL	A	717	14.963	78.622	-5.664	1.00	18.75	A
	ATOM	5658	N	ARG	A	718	15.165	76.754	-4.435	1.00	19.97	A
	ATOM	5659	CA	ARG	A	718	13.781	76.791	-3.976	1.00	21.50	A
	ATOM	5660	CB	ARG	A	718	13.408	75.451	-3.335	1.00	20.47	A
	ATOM	5661	CG	ARG	A	718	13.489	74.288	-4.302	1.00	20.11	A
50	ATOM	5662	CD	ARG	A	718	13.385	72.943	-3.604	1.00	19.03	A
	ATOM	5663	NE	ARG	A	718	13.656	71.860	-4.544	1.00	19.26	A
	ATOM	5664	CZ	ARG	A	718	13.681	70.569	-4.228	1.00	19.63	A
	ATOM	5665	NH1	ARG	A	718	13.449	70.180	-2.980	1.00	19.86	A
	ATOM	5666	NH2	ARG	A	718	13.944	69.668	-5.164	1.00	19.58	A
55	ATOM	5667	C	ARG	A	718	13.524	77.924	-2.992	1.00	22.88	A
	ATOM	5668	O	ARG	A	718	14.349	78.214	-2.130	1.00	22.82	A
	ATOM	5669	N	SER	A	719	12.371	78.567	-3.132	1.00	25.26	A
	ATOM	5670	CA	SER	A	719	12.001	79.666	-2.250	1.00	27.91	A
	ATOM	5671	CB	SER	A	719	11.035	80.614	-2.964	1.00	28.09	A

5	ATOM	5672	OG	SER	A	719	9.875	79.922	-3.389	1.00	29.06	A
	ATOM	5673	C	SER	A	719	11.346	79.111	-0.990	1.00	29.36	A
	ATOM	5674	O	SER	A	719	11.204	79.812	0.009	1.00	29.63	A
	ATOM	5675	N	HIS	A	720	10.952	77.841	-1.049	1.00	31.11	A
	ATOM	5676	CA	HIS	A	720	10.311	77.173	0.077	1.00	32.47	A
10	ATOM	5677	CB	HIS	A	720	8.848	76.867	-0.252	1.00	34.68	A
	ATOM	5678	CG	HIS	A	720	8.066	78.062	-0.697	1.00	37.29	A
	ATOM	5679	CD2	HIS	A	720	7.384	78.304	-1.842	1.00	38.42	A
	ATOM	5680	ND1	HIS	A	720	7.922	79.190	0.081	1.00	38.37	A
	ATOM	5681	CE1	HIS	A	720	7.185	80.077	-0.565	1.00	38.97	A
15	ATOM	5682	NE2	HIS	A	720	6.846	79.564	-1.734	1.00	39.06	A
	ATOM	5683	C	HIS	A	720	11.026	75.865	0.403	1.00	31.94	A
	ATOM	5684	O	HIS	A	720	11.453	75.142	-0.497	1.00	32.28	A
	ATOM	5685	N	GLY	A	721	11.153	75.569	1.692	1.00	30.87	A
	ATOM	5686	CA	GLY	A	721	11.798	74.335	2.105	1.00	29.22	A
20	ATOM	5687	C	GLY	A	721	13.315	74.357	2.100	1.00	27.82	A
	ATOM	5688	O	GLY	A	721	13.935	75.412	2.210	1.00	27.64	A
	ATOM	5689	N	ASP	A	722	13.906	73.172	1.966	1.00	26.07	A
	ATOM	5690	CA	ASP	A	722	15.356	73.002	1.960	1.00	24.10	A
	ATOM	5691	CB	ASP	A	722	15.692	71.509	1.918	1.00	23.11	A
25	ATOM	5692	CG	ASP	A	722	15.151	70.755	3.125	1.00	22.96	A
	ATOM	5693	OD1	ASP	A	722	15.073	69.509	3.069	1.00	21.33	A
	ATOM	5694	OD2	ASP	A	722	14.814	71.412	4.134	1.00	22.49	A
	ATOM	5695	C	ASP	A	722	16.029	73.717	0.795	1.00	23.18	A
	ATOM	5696	O	ASP	A	722	15.590	73.611	-0.348	1.00	22.51	A
30	ATOM	5697	N	ARG	A	723	17.101	74.444	1.096	1.00	22.44	A
	ATOM	5698	CA	ARG	A	723	17.844	75.179	0.080	1.00	22.26	A
	ATOM	5699	CB	ARG	A	723	18.173	76.595	0.567	1.00	24.76	A
	ATOM	5700	CG	ARG	A	723	17.039	77.606	0.440	1.00	29.74	A
	ATOM	5701	CD	ARG	A	723	15.975	77.422	1.506	1.00	33.28	A
35	ATOM	5702	NE	ARG	A	723	14.938	78.450	1.411	1.00	36.56	A
	ATOM	5703	CZ	ARG	A	723	13.960	78.617	2.297	1.00	38.09	A
	ATOM	5704	NH1	ARG	A	723	13.874	77.822	3.358	1.00	39.31	A
	ATOM	5705	NH2	ARG	A	723	13.067	79.584	2.126	1.00	39.06	A
	ATOM	5706	C	ARG	A	723	19.144	74.486	-0.310	1.00	20.66	A
40	ATOM	5707	O	ARG	A	723	19.776	73.811	0.506	1.00	19.49	A
	ATOM	5708	N	SER	A	724	19.537	74.665	-1.567	1.00	18.62	A
	ATOM	5709	CA	SER	A	724	20.771	74.087	-2.075	1.00	17.82	A
	ATOM	5710	CB	SER	A	724	20.882	74.309	-3.586	1.00	16.97	A
	ATOM	5711	OG	SER	A	724	19.807	73.698	-4.279	1.00	17.89	A
45	ATOM	5712	C	SER	A	724	21.947	74.763	-1.381	1.00	17.22	A
	ATOM	5713	O	SER	A	724	21.888	75.952	-1.053	1.00	17.26	A
	ATOM	5714	N	GLY	A	725	23.013	73.999	-1.164	1.00	16.49	A
	ATOM	5715	CA	GLY	A	725	24.207	74.530	-0.526	1.00	14.92	A
	ATOM	5716	C	GLY	A	725	25.428	73.840	-1.110	1.00	14.29	A
50	ATOM	5717	O	GLY	A	725	25.351	73.275	-2.201	1.00	14.17	A
	ATOM	5718	N	ALA	A	726	26.548	73.871	-0.392	1.00	13.42	A
	ATOM	5719	CA	ALA	A	726	27.778	73.241	-0.869	1.00	12.82	A
	ATOM	5720	CB	ALA	A	726	28.916	73.496	0.126	1.00	12.13	A
	ATOM	5721	C	ALA	A	726	27.624	71.736	-1.104	1.00	12.97	A
55	ATOM	5722	O	ALA	A	726	28.265	71.171	-1.994	1.00	13.34	A
	ATOM	5723	N	TYR	A	727	26.777	71.088	-0.309	1.00	12.39	A
	ATOM	5724	CA	TYR	A	727	26.574	69.647	-0.440	1.00	12.54	A
	ATOM	5725	CB	TYR	A	727	26.372	68.993	0.930	1.00	12.25	A
	ATOM	5726	CG	TYR	A	727	27.389	69.346	1.980	1.00	11.70	A

5	ATOM	5727	CD1	TYR	A	727	27.230	70.474	2.785	1.00	11.79	A
	ATOM	5728	CE1	TYR	A	727	28.162	70.785	3.776	1.00	12.23	A
	ATOM	5729	CD2	TYR	A	727	28.506	68.539	2.185	1.00	10.95	A
	ATOM	5730	CE2	TYR	A	727	29.441	68.840	3.165	1.00	10.75	A
	ATOM	5731	CZ	TYR	A	727	29.265	69.959	3.959	1.00	11.16	A
	ATOM	5732	OH	TYR	A	727	30.175	70.230	4.950	1.00	11.14	A
	ATOM	5733	C	TYR	A	727	25.368	69.272	-1.287	1.00	12.80	A
	ATOM	5734	O	TYR	A	727	25.465	68.461	-2.210	1.00	12.13	A
10	ATOM	5735	N	LEU	A	728	24.227	69.864	-0.948	1.00	13.19	A
	ATOM	5736	CA	LEU	A	728	22.965	69.563	-1.608	1.00	13.62	A
	ATOM	5737	CB	LEU	A	728	21.815	69.751	-0.611	1.00	13.85	A
	ATOM	5738	CG	LEU	A	728	21.981	69.108	0.769	1.00	12.94	A
15	ATOM	5739	CD1	LEU	A	728	20.719	69.334	1.599	1.00	12.74	A
	ATOM	5740	CD2	LEU	A	728	22.260	67.627	0.608	1.00	13.66	A
	ATOM	5741	C	LEU	A	728	22.616	70.325	-2.879	1.00	14.23	A
	ATOM	5742	O	LEU	A	728	22.853	71.527	-2.992	1.00	14.66	A
	ATOM	5743	N	PHE	A	729	22.038	69.592	-3.828	1.00	14.78	A
	ATOM	5744	CA	PHE	A	729	21.569	70.148	-5.089	1.00	15.09	A
20	ATOM	5745	CB	PHE	A	729	22.097	69.338	-6.278	1.00	14.90	A
	ATOM	5746	CG	PHE	A	729	21.636	69.848	-7.624	1.00	14.75	A
	ATOM	5747	CD1	PHE	A	729	21.579	68.992	-8.719	1.00	14.83	A
	ATOM	5748	CD2	PHE	A	729	21.280	71.186	-7.801	1.00	14.81	A
	ATOM	5749	CE1	PHE	A	729	21.174	69.456	-9.973	1.00	14.77	A
	ATOM	5750	CE2	PHE	A	729	20.875	71.661	-9.051	1.00	14.05	A
25	ATOM	5751	CZ	PHE	A	729	20.821	70.797	-10.137	1.00	14.66	A
	ATOM	5752	C	PHE	A	729	20.047	70.000	-4.997	1.00	15.61	A
	ATOM	5753	O	PHE	A	729	19.519	68.893	-5.089	1.00	15.12	A
	ATOM	5754	N	LEU	A	730	19.353	71.116	-4.794	1.00	15.87	A
30	ATOM	5755	CA	LEU	A	730	17.899	71.115	-4.673	1.00	16.28	A
	ATOM	5756	CB	LEU	A	730	17.504	71.461	-3.238	1.00	15.75	A
	ATOM	5757	CG	LEU	A	730	17.891	70.417	-2.186	1.00	16.05	A
	ATOM	5758	CD1	LEU	A	730	17.851	71.032	-0.800	1.00	16.81	A
	ATOM	5759	CD2	LEU	A	730	16.947	69.228	-2.281	1.00	15.75	A
	ATOM	5760	C	LEU	A	730	17.325	72.146	-5.631	1.00	16.38	A
35	ATOM	5761	O	LEU	A	730	16.851	73.203	-5.212	1.00	16.56	A
	ATOM	5762	N	PRO	A	731	17.353	71.843	-6.937	1.00	16.67	A
	ATOM	5763	CD	PRO	A	731	17.697	70.533	-7.522	1.00	16.03	A
	ATOM	5764	CA	PRO	A	731	16.843	72.752	-7.964	1.00	16.82	A
40	ATOM	5765	CB	PRO	A	731	17.196	72.031	-9.257	1.00	16.40	A
	ATOM	5766	CG	PRO	A	731	17.024	70.590	-8.872	1.00	16.72	A
	ATOM	5767	C	PRO	A	731	15.356	73.060	-7.873	1.00	17.55	A
	ATOM	5768	O	PRO	A	731	14.557	72.231	-7.429	1.00	16.89	A
	ATOM	5769	N	ASN	A	732	14.997	74.268	-8.294	1.00	18.54	A
	ATOM	5770	CA	ASN	A	732	13.604	74.686	-8.298	1.00	19.97	A
45	ATOM	5771	CB	ASN	A	732	13.494	76.193	-8.029	1.00	21.38	A
	ATOM	5772	CG	ASN	A	732	14.176	77.033	-9.092	1.00	22.50	A
	ATOM	5773	OD1	ASN	A	732	15.257	76.694	-9.569	1.00	23.48	A
	ATOM	5774	ND2	ASN	A	732	13.551	78.148	-9.457	1.00	23.21	A
50	ATOM	5775	C	ASN	A	732	13.051	74.335	-9.673	1.00	19.85	A
	ATOM	5776	O	ASN	A	732	12.525	75.188	-10.389	1.00	20.43	A
	ATOM	5777	N	GLY	A	733	13.198	73.063	-10.038	1.00	19.15	A
	ATOM	5778	CA	GLY	A	733	12.711	72.584	-11.319	1.00	19.07	A
	ATOM	5779	C	GLY	A	733	13.785	72.480	-12.384	1.00	19.05	A
	ATOM	5780	O	GLY	A	733	14.950	72.804	-12.126	1.00	18.33	A
55	ATOM	5781	N	PRO	A	734	13.424	72.020	-13.596	1.00	18.74	A

	ATOM	5782	CD	PRO A 734	12.079	71.580	-14.004	1.00	19.27	A
	ATOM	5783	CA	PRO A 734	14.372	71.878	-14.704	1.00	18.72	A
	ATOM	5784	CB	PRO A 734	13.488	71.423	-15.864	1.00	18.91	A
	ATOM	5785	CG	PRO A 734	12.381	70.691	-15.187	1.00	19.56	A
5	ATOM	5786	C	PRO A 734	15.040	73.216	-14.994	1.00	18.56	A
	ATOM	5787	O	PRO A 734	14.472	74.272	-14.716	1.00	17.70	A
	ATOM	5788	N	ALA A 735	16.236	73.163	-15.569	1.00	18.32	A
	ATOM	5789	CA	ALA A 735	16.990	74.370	-15.885	1.00	18.62	A
	ATOM	5790	CB	ALA A 735	18.389	73.996	-16.359	1.00	17.27	A
10	ATOM	5791	C	ALA A 735	16.298	75.230	-16.939	1.00	19.06	A
	ATOM	5792	O	ALA A 735	15.526	74.731	-17.756	1.00	19.40	A
	ATOM	5793	N	SER A 736	16.585	76.528	-16.902	1.00	19.80	A
	ATOM	5794	CA	SER A 736	16.024	77.488	-17.846	1.00	20.40	A
	ATOM	5795	CB	SER A 736	15.392	78.664	-17.097	1.00	20.65	A
15	ATOM	5796	OG	SER A 736	14.423	78.217	-16.164	1.00	23.95	A
	ATOM	5797	C	SER A 736	17.168	78.000	-18.716	1.00	20.53	A
	ATOM	5798	O	SER A 736	18.277	78.210	-18.229	1.00	19.37	A
	ATOM	5799	N	PRO A 737	16.911	78.217	-20.013	1.00	21.05	A
	ATOM	5800	CD	PRO A 737	15.647	78.006	-20.737	1.00	21.76	A
20	ATOM	5801	CA	PRO A 737	17.955	78.705	-20.919	1.00	22.31	A
	ATOM	5802	CB	PRO A 737	17.227	78.812	-22.261	1.00	22.46	A
	ATOM	5803	CG	PRO A 737	16.133	77.790	-22.147	1.00	22.19	A
	ATOM	5804	C	PRO A 737	18.539	80.048	-20.489	1.00	22.95	A
	ATOM	5805	O	PRO A 737	17.816	80.923	-20.015	1.00	22.83	A
25	ATOM	5806	N	VAL A 738	19.851	80.205	-20.641	1.00	24.07	A
	ATOM	5807	CA	VAL A 738	20.498	81.466	-20.301	1.00	24.73	A
	ATOM	5808	CB	VAL A 738	22.040	81.312	-20.194	1.00	25.09	A
	ATOM	5809	CG1	VAL A 738	22.700	82.688	-20.102	1.00	24.86	A
	ATOM	5810	CG2	VAL A 738	22.403	80.477	-18.973	1.00	24.29	A
30	ATOM	5811	C	VAL A 738	20.183	82.436	-21.441	1.00	25.95	A
	ATOM	5812	O	VAL A 738	20.322	82.083	-22.610	1.00	25.41	A
	ATOM	5813	N	GLU A 739	19.741	83.644	-21.102	1.00	26.97	A
	ATOM	5814	CA	GLU A 739	19.428	84.650	-22.114	1.00	28.25	A
	ATOM	5815	CB	GLU A 739	18.665	85.818	-21.488	1.00	30.01	A
35	ATOM	5816	CG	GLU A 739	17.303	85.431	-20.940	1.00	33.60	A
	ATOM	5817	CD	GLU A 739	16.353	84.951	-22.022	1.00	35.66	A
	ATOM	5818	OE1	GLU A 739	15.220	84.545	-21.681	1.00	37.20	A
	ATOM	5819	OE2	GLU A 739	16.734	84.983	-23.213	1.00	37.11	A
	ATOM	5820	C	GLU A 739	20.755	85.130	-22.681	1.00	27.58	A
40	ATOM	5821	O	GLU A 739	21.543	85.764	-21.981	1.00	27.38	A
	ATOM	5822	N	LEU A 740	20.989	84.826	-23.952	1.00	27.14	A
	ATOM	5823	CA	LEU A 740	22.244	85.170	-24.610	1.00	26.75	A
	ATOM	5824	CB	LEU A 740	22.579	84.100	-25.645	1.00	26.88	A
	ATOM	5825	CG	LEU A 740	22.553	82.653	-25.153	1.00	26.56	A
45	ATOM	5826	CD1	LEU A 740	22.920	81.733	-26.304	1.00	26.17	A
	ATOM	5827	CD2	LEU A 740	23.520	82.479	-23.985	1.00	26.74	A
	ATOM	5828	C	LEU A 740	22.323	86.532	-25.282	1.00	26.81	A
	ATOM	5829	O	LEU A 740	23.419	87.060	-25.475	1.00	26.49	A
	ATOM	5830	N	GLY A 741	21.177	87.100	-25.642	1.00	26.45	A
50	ATOM	5831	CA	GLY A 741	21.192	88.383	-26.318	1.00	26.66	A
	ATOM	5832	C	GLY A 741	21.866	88.202	-27.666	1.00	26.47	A
	ATOM	5833	O	GLY A 741	21.623	87.211	-28.352	1.00	27.08	A
	ATOM	5834	N	GLN A 742	22.713	89.150	-28.050	1.00	26.64	A
	ATOM	5835	CA	GLN A 742	23.431	89.070	-29.319	1.00	26.29	A
55	ATOM	5836	CB	GLN A 742	23.055	90.256	-30.214	1.00	28.36	A

5	ATOM	5837	CG	GLN	A	742	21.562	90.324	-30.534	1.00	31.41	A
	ATOM	5838	CD	GLN	A	742	21.193	91.499	-31.424	1.00	33.06	A
	ATOM	5839	OE1	GLN	A	742	21.654	91.603	-32.562	1.00	35.27	A
	ATOM	5840	NE2	GLN	A	742	20.353	92.389	-30.908	1.00	34.23	A
	ATOM	5841	C	GLN	A	742	24.924	89.088	-28.996	1.00	24.83	A
10	ATOM	5842	O	GLN	A	742	25.595	90.106	-29.149	1.00	25.14	A
	ATOM	5843	N	PRO	A	743	25.460	87.942	-28.545	1.00	23.56	A
	ATOM	5844	CD	PRO	A	743	24.758	86.644	-28.504	1.00	22.94	A
	ATOM	5845	CA	PRO	A	743	26.869	87.778	-28.175	1.00	21.91	A
	ATOM	5846	CB	PRO	A	743	26.910	86.355	-27.629	1.00	22.16	A
15	ATOM	5847	CG	PRO	A	743	25.902	85.654	-28.484	1.00	22.68	A
	ATOM	5848	C	PRO	A	743	27.886	87.995	-29.289	1.00	20.81	A
	ATOM	5849	O	PRO	A	743	27.612	87.742	-30.462	1.00	20.15	A
	ATOM	5850	N	VAL	A	744	29.068	88.469	-28.903	1.00	19.08	A
	ATOM	5851	CA	VAL	A	744	30.146	88.704	-29.849	1.00	17.97	A
20	ATOM	5852	CB	VAL	A	744	31.143	89.751	-29.314	1.00	17.62	A
	ATOM	5853	CG1	VAL	A	744	32.305	89.900	-30.280	1.00	16.50	A
	ATOM	5854	CG2	VAL	A	744	30.435	91.090	-29.124	1.00	18.66	A
	ATOM	5855	C	VAL	A	744	30.875	87.385	-30.078	1.00	17.11	A
	ATOM	5856	O	VAL	A	744	31.257	86.704	-29.125	1.00	16.81	A
25	ATOM	5857	N	VAL	A	745	31.054	87.028	-31.344	1.00	15.64	A
	ATOM	5858	CA	VAL	A	745	31.719	85.784	-31.712	1.00	14.94	A
	ATOM	5859	CB	VAL	A	745	30.820	84.932	-32.634	1.00	13.94	A
	ATOM	5860	CG1	VAL	A	745	31.534	83.643	-33.011	1.00	14.63	A
	ATOM	5861	CG2	VAL	A	745	29.501	84.635	-31.943	1.00	14.28	A
30	ATOM	5862	C	VAL	A	745	33.033	86.033	-32.436	1.00	14.70	A
	ATOM	5863	O	VAL	A	745	33.090	86.826	-33.375	1.00	14.58	A
	ATOM	5864	N	LEU	A	746	34.089	85.351	-31.999	1.00	14.53	A
	ATOM	5865	CA	LEU	A	746	35.402	85.494	-32.619	1.00	14.40	A
	ATOM	5866	CB	LEU	A	746	36.460	85.856	-31.573	1.00	14.29	A
35	ATOM	5867	CG	LEU	A	746	37.910	85.863	-32.082	1.00	14.37	A
	ATOM	5868	CD1	LEU	A	746	38.105	86.957	-33.125	1.00	15.10	A
	ATOM	5869	CD2	LEU	A	746	38.853	86.084	-30.908	1.00	15.27	A
	ATOM	5870	C	LEU	A	746	35.815	84.204	-33.315	1.00	14.39	A
	ATOM	5871	O	LEU	A	746	35.920	83.152	-32.683	1.00	13.94	A
40	ATOM	5872	N	VAL	A	747	36.066	84.298	-34.615	1.00	14.21	A
	ATOM	5873	CA	VAL	A	747	36.467	83.135	-35.396	1.00	15.07	A
	ATOM	5874	CB	VAL	A	747	35.556	82.952	-36.639	1.00	14.86	A
	ATOM	5875	CG1	VAL	A	747	35.974	81.703	-37.414	1.00	15.78	A
	ATOM	5876	CG2	VAL	A	747	34.098	82.851	-36.205	1.00	14.92	A
45	ATOM	5877	C	VAL	A	747	37.909	83.263	-35.861	1.00	15.47	A
	ATOM	5878	O	VAL	A	747	38.272	84.217	-36.553	1.00	16.02	A
	ATOM	5879	N	THR	A	748	38.736	82.305	-35.465	1.00	15.28	A
	ATOM	5880	CA	THR	A	748	40.134	82.299	-35.861	1.00	16.46	A
	ATOM	5881	CB	THR	A	748	41.065	82.284	-34.627	1.00	16.60	A
50	ATOM	5882	OG1	THR	A	748	40.862	83.485	-33.869	1.00	16.45	A
	ATOM	5883	CG2	THR	A	748	42.531	82.197	-35.056	1.00	16.62	A
	ATOM	5884	C	THR	A	748	40.361	81.048	-36.696	1.00	17.60	A
	ATOM	5885	O	THR	A	748	40.133	79.931	-36.228	1.00	17.28	A
	ATOM	5886	N	LYS	A	749	40.796	81.236	-37.938	1.00	18.35	A
55	ATOM	5887	CA	LYS	A	749	41.031	80.112	-38.829	1.00	19.29	A
	ATOM	5888	CB	LYS	A	749	40.192	80.263	-40.099	1.00	21.29	A
	ATOM	5889	CG	LYS	A	749	40.406	79.139	-41.100	1.00	23.49	A
	ATOM	5890	CD	LYS	A	749	39.530	79.306	-42.328	1.00	26.20	A
	ATOM	5891	CE	LYS	A	749	39.772	78.172	-43.314	1.00	27.68	A

	ATOM	5892	NZ	LYS	A	749	38.949	78.318	-44.543	1.00	30.91	A
	ATOM	5893	C	LYS	A	749	42.498	79.971	-39.202	1.00	19.15	A
	ATOM	5894	O	LYS	A	749	43.095	80.878	-39.791	1.00	18.79	A
5	ATOM	5895	N	GLY	A	750	43.069	78.821	-38.862	1.00	18.42	A
	ATOM	5896	CA	GLY	A	750	44.465	78.568	-39.164	1.00	18.50	A
	ATOM	5897	C	GLY	A	750	44.660	77.198	-39.774	1.00	18.80	A
	ATOM	5898	O	GLY	A	750	43.759	76.354	-39.732	1.00	18.11	A
	ATOM	5899	N	LYS	A	751	45.839	76.978	-40.346	1.00	19.14	A
10	ATOM	5900	CA	LYS	A	751	46.161	75.706	-40.977	1.00	19.90	A
	ATOM	5901	CB	LYS	A	751	47.461	75.830	-41.777	1.00	22.12	A
	ATOM	5902	CG	LYS	A	751	47.381	76.754	-42.990	1.00	26.04	A
	ATOM	5903	CD	LYS	A	751	46.556	76.130	-44.111	1.00	28.95	A
	ATOM	5904	CE	LYS	A	751	46.615	76.970	-45.385	1.00	29.97	A
15	ATOM	5905	NZ	LYS	A	751	45.821	76.357	-46.492	1.00	31.69	A
	ATOM	5906	C	LYS	A	751	46.315	74.589	-39.949	1.00	18.94	A
	ATOM	5907	O	LYS	A	751	45.995	73.435	-40.227	1.00	18.88	A
	ATOM	5908	N	LEU	A	752	46.805	74.937	-38.764	1.00	17.91	A
	ATOM	5909	CA	LEU	A	752	47.018	73.952	-37.709	1.00	17.62	A
20	ATOM	5910	CB	LEU	A	752	48.396	74.157	-37.073	1.00	17.88	A
	ATOM	5911	CG	LEU	A	752	49.624	74.124	-37.989	1.00	18.55	A
	ATOM	5912	CD1	LEU	A	752	50.882	74.300	-37.146	1.00	19.24	A
	ATOM	5913	CD2	LEU	A	752	49.674	72.806	-38.753	1.00	19.87	A
	ATOM	5914	C	LEU	A	752	45.957	73.995	-36.615	1.00	16.94	A
25	ATOM	5915	O	LEU	A	752	45.637	72.970	-36.010	1.00	16.36	A
	ATOM	5916	N	GLU	A	753	45.415	75.180	-36.361	1.00	15.88	A
	ATOM	5917	CA	GLU	A	753	44.409	75.339	-35.322	1.00	16.00	A
	ATOM	5918	CB	GLU	A	753	45.089	75.654	-33.986	1.00	16.54	A
	ATOM	5919	CG	GLU	A	753	44.133	75.776	-32.803	1.00	19.19	A
30	ATOM	5920	CD	GLU	A	753	44.826	76.245	-31.535	1.00	20.56	A
	ATOM	5921	OE1	GLU	A	753	45.182	77.438	-31.454	1.00	21.29	A
	ATOM	5922	OE2	GLU	A	753	45.022	75.419	-30.619	1.00	22.13	A
	ATOM	5923	C	GLU	A	753	43.418	76.451	-35.648	1.00	16.08	A
	ATOM	5924	O	GLU	A	753	43.807	77.550	-36.049	1.00	15.51	A
35	ATOM	5925	N	SER	A	754	42.137	76.155	-35.474	1.00	15.21	A
	ATOM	5926	CA	SER	A	754	41.086	77.133	-35.710	1.00	14.74	A
	ATOM	5927	CB	SER	A	754	40.266	76.761	-36.945	1.00	15.36	A
	ATOM	5928	OG	SER	A	754	41.069	76.794	-38.111	1.00	15.30	A
	ATOM	5929	C	SER	A	754	40.205	77.085	-34.477	1.00	15.07	A
40	ATOM	5930	O	SER	A	754	40.272	76.124	-33.707	1.00	15.07	A
	ATOM	5931	N	SER	A	755	39.383	78.106	-34.277	1.00	14.22	A
	ATOM	5932	CA	SER	A	755	38.510	78.111	-33.115	1.00	15.10	A
	ATOM	5933	CB	SER	A	755	39.316	78.412	-31.848	1.00	16.03	A
	ATOM	5934	OG	SER	A	755	39.812	79.737	-31.867	1.00	16.70	A
45	ATOM	5935	C	SER	A	755	37.378	79.114	-33.230	1.00	14.43	A
	ATOM	5936	O	SER	A	755	37.424	80.045	-34.038	1.00	14.90	A
	ATOM	5937	N	VAL	A	756	36.354	78.898	-32.419	1.00	13.70	A
	ATOM	5938	CA	VAL	A	756	35.208	79.784	-32.360	1.00	14.05	A
	ATOM	5939	CB	VAL	A	756	33.937	79.117	-32.913	1.00	13.69	A
50	ATOM	5940	CG1	VAL	A	756	32.736	80.036	-32.701	1.00	14.07	A
	ATOM	5941	CG2	VAL	A	756	34.122	78.796	-34.391	1.00	14.09	A
	ATOM	5942	C	VAL	A	756	35.019	80.079	-30.879	1.00	13.94	A
	ATOM	5943	O	VAL	A	756	34.833	79.162	-30.078	1.00	14.01	A
	ATOM	5944	N	SER	A	757	35.085	81.357	-30.522	1.00	13.67	A
	ATOM	5945	CA	SER	A	757	34.936	81.783	-29.136	1.00	14.33	A
55	ATOM	5946	CB	SER	A	757	36.245	82.408	-28.642	1.00	14.45	A

5	ATOM	5947	OG	SER	A	757	37.343	81.536	-28.866	1.00	17.98	A
	ATOM	5948	C	SER	A	757	33.815	82.806	-29.029	1.00	13.90	A
	ATOM	5949	O	SER	A	757	33.703	83.688	-29.872	1.00	14.57	A
	ATOM	5950	N	VAL	A	758	32.985	82.690	-27.997	1.00	13.86	A
	ATOM	5951	CA	VAL	A	758	31.883	83.633	-27.820	1.00	14.32	A
10	ATOM	5952	CB	VAL	A	758	30.539	83.031	-28.334	1.00	14.99	A
	ATOM	5953	CG1	VAL	A	758	30.255	81.697	-27.652	1.00	15.26	A
	ATOM	5954	CG2	VAL	A	758	29.400	84.010	-28.089	1.00	14.66	A
	ATOM	5955	C	VAL	A	758	31.737	84.071	-26.366	1.00	14.81	A
	ATOM	5956	O	VAL	A	758	31.849	83.259	-25.439	1.00	14.83	A
15	ATOM	5957	N	GLY	A	759	31.514	85.369	-26.176	1.00	14.65	A
	ATOM	5958	CA	GLY	A	759	31.352	85.915	-24.843	1.00	15.14	A
	ATOM	5959	C	GLY	A	759	29.902	85.865	-24.406	1.00	16.00	A
	ATOM	5960	O	GLY	A	759	29.102	86.744	-24.738	1.00	15.45	A
	ATOM	5961	N	LEU	A	760	29.560	84.822	-23.663	1.00	15.97	A
20	ATOM	5962	CA	LEU	A	760	28.205	84.640	-23.168	1.00	17.13	A
	ATOM	5963	CB	LEU	A	760	27.828	83.157	-23.228	1.00	17.83	A
	ATOM	5964	CG	LEU	A	760	27.974	82.466	-24.585	1.00	17.97	A
	ATOM	5965	CD1	LEU	A	760	27.745	80.971	-24.427	1.00	18.75	A
	ATOM	5966	CD2	LEU	A	760	26.981	83.061	-25.575	1.00	19.05	A
25	ATOM	5967	C	LEU	A	760	28.147	85.117	-21.726	1.00	17.20	A
	ATOM	5968	O	LEU	A	760	29.181	85.275	-21.076	1.00	17.55	A
	ATOM	5969	N	PRO	A	761	26.939	85.365	-21.203	1.00	17.67	A
	ATOM	5970	CD	PRO	A	761	25.623	85.445	-21.859	1.00	17.96	A
	ATOM	5971	CA	PRO	A	761	26.863	85.817	-19.811	1.00	18.19	A
30	ATOM	5972	CB	PRO	A	761	25.365	86.026	-19.600	1.00	18.69	A
	ATOM	5973	CG	PRO	A	761	24.888	86.419	-20.969	1.00	18.84	A
	ATOM	5974	C	PRO	A	761	27.434	84.735	-18.889	1.00	18.29	A
	ATOM	5975	O	PRO	A	761	26.957	83.597	-18.892	1.00	18.07	A
	ATOM	5976	N	SER	A	762	28.464	85.094	-18.127	1.00	17.62	A
35	ATOM	5977	CA	SER	A	762	29.121	84.189	-17.182	1.00	17.31	A
	ATOM	5978	CB	SER	A	762	28.084	83.390	-16.379	1.00	17.41	A
	ATOM	5979	OG	SER	A	762	27.237	84.229	-15.623	1.00	18.47	A
	ATOM	5980	C	SER	A	762	30.094	83.196	-17.808	1.00	17.10	A
	ATOM	5981	O	SER	A	762	30.812	82.493	-17.087	1.00	17.23	A
40	ATOM	5982	N	VAL	A	763	30.134	83.126	-19.134	1.00	16.20	A
	ATOM	5983	CA	VAL	A	763	31.013	82.160	-19.782	1.00	16.03	A
	ATOM	5984	CB	VAL	A	763	30.283	80.805	-19.995	1.00	15.77	A
	ATOM	5985	CG1	VAL	A	763	31.236	79.785	-20.606	1.00	15.66	A
	ATOM	5986	CG2	VAL	A	763	29.720	80.290	-18.680	1.00	16.14	A
45	ATOM	5987	C	VAL	A	763	31.564	82.560	-21.140	1.00	15.81	A
	ATOM	5988	O	VAL	A	763	30.815	82.958	-22.031	1.00	16.03	A
	ATOM	5989	N	VAL	A	764	32.881	82.473	-21.288	1.00	14.86	A
	ATOM	5990	CA	VAL	A	764	33.496	82.722	-22.580	1.00	14.90	A
	ATOM	5991	CB	VAL	A	764	34.873	83.415	-22.464	1.00	15.02	A
50	ATOM	5992	CG1	VAL	A	764	35.533	83.497	-23.838	1.00	15.39	A
	ATOM	5993	CG2	VAL	A	764	34.701	84.815	-21.888	1.00	14.57	A
	ATOM	5994	C	VAL	A	764	33.666	81.276	-23.041	1.00	15.18	A
	ATOM	5995	O	VAL	A	764	34.509	80.543	-22.518	1.00	14.33	A
	ATOM	5996	N	HIS	A	765	32.818	80.872	-23.982	1.00	14.66	A
55	ATOM	5997	CA	HIS	A	765	32.788	79.515	-24.524	1.00	14.46	A
	ATOM	5998	CB	HIS	A	765	31.340	79.162	-24.895	1.00	14.53	A
	ATOM	5999	CG	HIS	A	765	31.153	77.751	-25.359	1.00	15.89	A
	ATOM	6000	CD2	HIS	A	765	31.423	76.571	-24.754	1.00	14.81	A
	ATOM	6001	ND1	HIS	A	765	30.614	77.437	-26.589	1.00	16.76	A

5	ATOM	6002	CE1	HIS	A	765	30.562	76.124	-26.722	1.00	15.67	A
	ATOM	6003	NE2	HIS	A	765	31.048	75.575	-25.623	1.00	17.15	A
	ATOM	6004	C	HIS	A	765	33.684	79.424	-25.752	1.00	14.53	A
	ATOM	6005	O	HIS	A	765	33.570	80.235	-26.670	1.00	13.37	A
	ATOM	6006	N	GLN	A	766	34.567	78.431	-25.775	1.00	14.08	A
10	ATOM	6007	CA	GLN	A	766	35.490	78.280	-26.892	1.00	15.14	A
	ATOM	6008	CB	GLN	A	766	36.898	78.699	-26.460	1.00	16.53	A
	ATOM	6009	CG	GLN	A	766	36.955	79.975	-25.632	1.00	20.12	A
	ATOM	6010	CD	GLN	A	766	38.142	79.989	-24.678	1.00	23.07	A
	ATOM	6011	OE1	GLN	A	766	39.288	79.816	-25.096	1.00	24.43	A
15	ATOM	6012	NE2	GLN	A	766	37.868	80.191	-23.386	1.00	22.97	A
	ATOM	6013	C	GLN	A	766	35.557	76.859	-27.435	1.00	14.87	A
	ATOM	6014	O	GLN	A	766	35.689	75.900	-26.671	1.00	14.51	A
	ATOM	6015	N	THR	A	767	35.464	76.732	-28.756	1.00	13.43	A
	ATOM	6016	CA	THR	A	767	35.564	75.433	-29.411	1.00	13.83	A
20	ATOM	6017	CB	THR	A	767	34.340	75.141	-30.303	1.00	13.86	A
	ATOM	6018	OG1	THR	A	767	33.150	75.212	-29.513	1.00	14.60	A
	ATOM	6019	CG2	THR	A	767	34.444	73.741	-30.906	1.00	14.49	A
	ATOM	6020	C	THR	A	767	36.828	75.495	-30.262	1.00	14.12	A
	ATOM	6021	O	THR	A	767	36.919	76.284	-31.207	1.00	14.35	A
25	ATOM	6022	N	ILE	A	768	37.808	74.668	-29.913	1.00	14.54	A
	ATOM	6023	CA	ILE	A	768	39.088	74.651	-30.612	1.00	15.59	A
	ATOM	6024	CB	ILE	A	768	40.243	74.766	-29.599	1.00	15.69	A
	ATOM	6025	CG2	ILE	A	768	41.561	74.972	-30.327	1.00	17.18	A
	ATOM	6026	CG1	ILE	A	768	39.970	75.931	-28.648	1.00	17.37	A
30	ATOM	6027	CD1	ILE	A	768	40.946	76.027	-27.489	1.00	18.23	A
	ATOM	6028	C	ILE	A	768	39.274	73.391	-31.448	1.00	15.73	A
	ATOM	6029	O	ILE	A	768	39.008	72.279	-30.984	1.00	15.43	A
	ATOM	6030	N	MET	A	769	39.736	73.570	-32.681	1.00	16.42	A
	ATOM	6031	CA	MET	A	769	39.938	72.449	-33.595	1.00	17.29	A
35	ATOM	6032	CB	MET	A	769	39.030	72.612	-34.816	1.00	18.73	A
	ATOM	6033	CG	MET	A	769	37.549	72.608	-34.478	1.00	19.51	A
	ATOM	6034	SD	MET	A	769	36.524	73.303	-35.794	1.00	22.39	A
	ATOM	6035	CE	MET	A	769	36.428	74.985	-35.246	1.00	22.33	A
	ATOM	6036	C	MET	A	769	41.384	72.320	-34.050	1.00	17.69	A
40	ATOM	6037	O	MET	A	769	42.004	73.302	-34.468	1.00	16.93	A
	ATOM	6038	N	ARG	A	770	41.914	71.101	-33.977	1.00	17.77	A
	ATOM	6039	CA	ARG	A	770	43.289	70.849	-34.378	1.00	18.83	A
	ATOM	6040	CB	ARG	A	770	44.161	70.653	-33.137	1.00	19.71	A
	ATOM	6041	CG	ARG	A	770	44.144	71.853	-32.207	1.00	22.50	A
45	ATOM	6042	CD	ARG	A	770	44.964	71.617	-30.951	1.00	24.80	A
	ATOM	6043	NE	ARG	A	770	44.861	72.752	-30.040	1.00	27.76	A
	ATOM	6044	CZ	ARG	A	770	45.414	72.799	-28.833	1.00	29.18	A
	ATOM	6045	NH1	ARG	A	770	46.118	71.769	-28.379	1.00	29.75	A
	ATOM	6046	NH2	ARG	A	770	45.262	73.880	-28.078	1.00	30.25	A
50	ATOM	6047	C	ARG	A	770	43.424	69.645	-35.305	1.00	18.94	A
	ATOM	6048	O	ARG	A	770	44.527	69.147	-35.528	1.00	19.08	A
	ATOM	6049	N	GLY	A	771	42.302	69.177	-35.839	1.00	19.13	A
	ATOM	6050	CA	GLY	A	771	42.346	68.045	-36.747	1.00	20.15	A
	ATOM	6051	C	GLY	A	771	41.608	66.810	-36.274	1.00	20.51	A
55	ATOM	6052	O	GLY	A	771	41.376	65.886	-37.057	1.00	22.20	A
	ATOM	6053	N	GLY	A	772	41.250	66.777	-34.995	1.00	20.11	A
	ATOM	6054	CA	GLY	A	772	40.530	65.631	-34.468	1.00	19.12	A
	ATOM	6055	C	GLY	A	772	39.341	66.092	-33.651	1.00	18.40	A
	ATOM	6056	O	GLY	A	772	38.737	67.125	-33.957	1.00	17.47	A

	ATOM	6057	N	ALA	A	773	38.994	65.334	-32.617	1.00	17.19	A
	ATOM	6058	CA	ALA	A	773	37.880	65.721	-31.770	1.00	16.28	A
	ATOM	6059	CB	ALA	A	773	37.730	64.744	-30.609	1.00	16.74	A
5	ATOM	6060	C	ALA	A	773	38.208	67.118	-31.249	1.00	15.85	A
	ATOM	6061	O	ALA	A	773	39.344	67.396	-30.858	1.00	15.72	A
	ATOM	6062	N	PRO	A	774	37.220	68.021	-31.252	1.00	14.95	A
	ATOM	6063	CD	PRO	A	774	35.834	67.870	-31.729	1.00	14.54	A
	ATOM	6064	CA	PRO	A	774	37.465	69.382	-30.769	1.00	14.51	A
10	ATOM	6065	CB	PRO	A	774	36.203	70.128	-31.190	1.00	14.89	A
	ATOM	6066	CG	PRO	A	774	35.147	69.068	-31.100	1.00	15.90	A
	ATOM	6067	C	PRO	A	774	37.696	69.461	-29.264	1.00	14.10	A
	ATOM	6068	O	PRO	A	774	37.293	68.574	-28.509	1.00	13.79	A
	ATOM	6069	N	GLU	A	775	38.366	70.528	-28.842	1.00	13.81	A
15	ATOM	6070	CA	GLU	A	775	38.613	70.768	-27.432	1.00	13.78	A
	ATOM	6071	CB	GLU	A	775	40.059	71.216	-27.187	1.00	14.79	A
	ATOM	6072	CG	GLU	A	775	40.363	71.499	-25.712	1.00	17.46	A
	ATOM	6073	CD	GLU	A	775	41.780	71.993	-25.473	1.00	19.38	A
	ATOM	6074	OE1	GLU	A	775	42.685	71.613	-26.246	1.00	21.30	A
20	ATOM	6075	OE2	GLU	A	775	41.993	72.746	-24.496	1.00	20.86	A
	ATOM	6076	C	GLU	A	775	37.664	71.902	-27.074	1.00	13.37	A
	ATOM	6077	O	GLU	A	775	37.471	72.828	-27.863	1.00	13.38	A
	ATOM	6078	N	ILE	A	776	37.051	71.818	-25.904	1.00	13.11	A
	ATOM	6079	CA	ILE	A	776	36.138	72.863	-25.469	1.00	13.46	A
25	ATOM	6080	CB	ILE	A	776	34.744	72.301	-25.117	1.00	14.14	A
	ATOM	6081	CG2	ILE	A	776	33.790	73.451	-24.809	1.00	14.86	A
	ATOM	6082	CG1	ILE	A	776	34.217	71.423	-26.256	1.00	14.67	A
	ATOM	6083	CD1	ILE	A	776	34.074	72.134	-27.589	1.00	15.09	A
	ATOM	6084	C	ILE	A	776	36.717	73.489	-24.211	1.00	13.09	A
	ATOM	6085	O	ILE	A	776	37.173	72.777	-23.313	1.00	12.40	A
30	ATOM	6086	N	ARG	A	777	36.715	74.817	-24.155	1.00	13.21	A
	ATOM	6087	CA	ARG	A	777	37.210	75.527	-22.981	1.00	12.69	A
	ATOM	6088	CB	ARG	A	777	38.529	76.246	-23.285	1.00	13.71	A
	ATOM	6089	CG	ARG	A	777	39.679	75.327	-23.657	1.00	13.57	A
35	ATOM	6090	CD	ARG	A	777	40.982	76.107	-23.811	1.00	14.60	A
	ATOM	6091	NE	ARG	A	777	42.053	75.272	-24.350	1.00	14.70	A
	ATOM	6092	CZ	ARG	A	777	43.222	75.739	-24.782	1.00	16.35	A
	ATOM	6093	NH1	ARG	A	777	43.477	77.042	-24.737	1.00	17.89	A
	ATOM	6094	NH2	ARG	A	777	44.133	74.906	-25.272	1.00	16.86	A
	ATOM	6095	C	ARG	A	777	36.165	76.552	-22.567	1.00	12.89	A
40	ATOM	6096	O	ARG	A	777	35.654	77.303	-23.404	1.00	12.83	A
	ATOM	6097	N	ASN	A	778	35.834	76.560	-21.281	1.00	12.52	A
	ATOM	6098	CA	ASN	A	778	34.867	77.503	-20.740	1.00	12.48	A
	ATOM	6099	CB	ASN	A	778	33.681	76.786	-20.080	1.00	13.02	A
	ATOM	6100	CG	ASN	A	778	32.744	76.134	-21.080	1.00	12.77	A
45	ATOM	6101	OD1	ASN	A	778	32.722	76.494	-22.259	1.00	12.70	A
	ATOM	6102	ND2	ASN	A	778	31.944	75.180	-20.604	1.00	11.18	A
	ATOM	6103	C	ASN	A	778	35.519	78.371	-19.677	1.00	13.06	A
	ATOM	6104	O	ASN	A	778	35.991	77.856	-18.661	1.00	12.54	A
	ATOM	6105	N	LEU	A	779	35.557	79.680	-19.907	1.00	12.87	A
50	ATOM	6106	CA	LEU	A	779	36.100	80.590	-18.905	1.00	13.87	A
	ATOM	6107	CB	LEU	A	779	36.749	81.814	-19.562	1.00	15.11	A
	ATOM	6108	CG	LEU	A	779	37.244	82.906	-18.603	1.00	16.41	A
	ATOM	6109	CD1	LEU	A	779	38.237	82.328	-17.610	1.00	17.15	A
	ATOM	6110	CD2	LEU	A	779	37.882	84.031	-19.403	1.00	17.46	A
55	ATOM	6111	C	LEU	A	779	34.857	80.992	-18.121	1.00	13.84	A

5	ATOM	6112	O	LEU	A	779	34.120	81.894	-18.519	1.00	14.16	A
	ATOM	6113	N	VAL	A	780	34.627	80.298	-17.012	1.00	14.09	A
	ATOM	6114	CA	VAL	A	780	33.450	80.509	-16.181	1.00	14.38	A
	ATOM	6115	CB	VAL	A	780	32.975	79.160	-15.578	1.00	13.50	A
	ATOM	6116	CG1	VAL	A	780	31.658	79.348	-14.830	1.00	14.96	A
10	ATOM	6117	CG2	VAL	A	780	32.813	78.131	-16.681	1.00	12.78	A
	ATOM	6118	C	VAL	A	780	33.612	81.519	-15.046	1.00	14.62	A
	ATOM	6119	O	VAL	A	780	34.436	81.342	-14.156	1.00	14.42	A
	ATOM	6120	N	ASP	A	781	32.810	82.577	-15.096	1.00	15.08	A
	ATOM	6121	CA	ASP	A	781	32.824	83.616	-14.069	1.00	15.19	A
15	ATOM	6122	CB	ASP	A	781	33.503	84.886	-14.582	1.00	16.51	A
	ATOM	6123	CG	ASP	A	781	33.578	85.975	-13.522	1.00	17.79	A
	ATOM	6124	OD1	ASP	A	781	34.045	87.088	-13.847	1.00	19.59	A
	ATOM	6125	OD2	ASP	A	781	33.174	85.718	-12.366	1.00	17.43	A
	ATOM	6126	C	ASP	A	781	31.371	83.909	-13.738	1.00	15.21	A
20	ATOM	6127	O	ASP	A	781	30.736	84.763	-14.363	1.00	14.21	A
	ATOM	6128	N	ILE	A	782	30.851	83.182	-12.758	1.00	15.24	A
	ATOM	6129	CA	ILE	A	782	29.467	83.324	-12.344	1.00	16.76	A
	ATOM	6130	CB	ILE	A	782	29.075	82.148	-11.416	1.00	16.22	A
	ATOM	6131	CG2	ILE	A	782	29.673	82.352	-10.025	1.00	15.94	A
25	ATOM	6132	CG1	ILE	A	782	27.555	82.016	-11.348	1.00	16.35	A
	ATOM	6133	CD1	ILE	A	782	27.095	80.690	-10.765	1.00	14.49	A
	ATOM	6134	C	ILE	A	782	29.203	84.673	-11.664	1.00	18.22	A
	ATOM	6135	O	ILE	A	782	28.070	84.988	-11.311	1.00	19.23	A
	ATOM	6136	N	GLY	A	783	30.257	85.466	-11.493	1.00	19.97	A
30	ATOM	6137	CA	GLY	A	783	30.117	86.784	-10.890	1.00	22.08	A
	ATOM	6138	C	GLY	A	783	29.283	86.844	-9.624	1.00	23.38	A
	ATOM	6139	O	GLY	A	783	29.552	86.123	-8.663	1.00	23.43	A
	ATOM	6140	N	SER	A	784	28.266	87.702	-9.616	1.00	24.74	A
	ATOM	6141	CA	SER	A	784	27.412	87.840	-8.439	1.00	26.45	A
35	ATOM	6142	CB	SER	A	784	27.329	89.311	-8.014	1.00	27.09	A
	ATOM	6143	OG	SER	A	784	26.712	90.107	-9.012	1.00	29.22	A
	ATOM	6144	C	SER	A	784	26.002	87.274	-8.628	1.00	27.13	A
	ATOM	6145	O	SER	A	784	25.067	87.676	-7.933	1.00	27.56	A
	ATOM	6146	N	LEU	A	785	25.853	86.339	-9.563	1.00	26.95	A
40	ATOM	6147	CA	LEU	A	785	24.558	85.712	-9.820	1.00	26.92	A
	ATOM	6148	CB	LEU	A	785	24.587	84.955	-11.152	1.00	27.50	A
	ATOM	6149	CG	LEU	A	785	24.491	85.746	-12.461	1.00	28.53	A
	ATOM	6150	CD1	LEU	A	785	25.503	86.875	-12.478	1.00	29.75	A
	ATOM	6151	CD2	LEU	A	785	24.729	84.802	-13.629	1.00	28.80	A
45	ATOM	6152	C	LEU	A	785	24.230	84.739	-8.691	1.00	26.47	A
	ATOM	6153	O	LEU	A	785	24.457	83.531	-8.810	1.00	26.29	A
	ATOM	6154	N	ASP	A	786	23.688	85.265	-7.598	1.00	25.45	A
	ATOM	6155	CA	ASP	A	786	23.348	84.438	-6.446	1.00	24.78	A
	ATOM	6156	CB	ASP	A	786	22.884	85.315	-5.281	1.00	26.58	A
50	ATOM	6157	CG	ASP	A	786	23.875	86.409	-4.947	1.00	28.38	A
	ATOM	6158	OD1	ASP	A	786	25.073	86.102	-4.770	1.00	27.73	A
	ATOM	6159	OD2	ASP	A	786	23.449	87.581	-4.863	1.00	30.70	A
	ATOM	6160	C	ASP	A	786	22.284	83.383	-6.731	1.00	22.89	A
	ATOM	6161	O	ASP	A	786	21.401	83.573	-7.572	1.00	22.07	A
55	ATOM	6162	N	ASN	A	787	22.380	82.274	-6.006	1.00	21.19	A
	ATOM	6163	CA	ASN	A	787	21.450	81.161	-6.135	1.00	20.77	A
	ATOM	6164	CB	ASN	A	787	20.110	81.522	-5.495	1.00	21.66	A
	ATOM	6165	CG	ASN	A	787	20.249	81.835	-4.020	1.00	23.65	A
	ATOM	6166	OD1	ASN	A	787	20.912	81.103	-3.283	1.00	24.06	A

	ATOM	6167	ND2	ASN	A	787	19.629	82.922	-3.580	1.00	24.91	A
	ATOM	6168	C	ASN	A	787	21.261	80.749	-7.583	1.00	19.69	A
	ATOM	6169	O	ASN	A	787	20.141	80.599	-8.070	1.00	19.17	A
5	ATOM	6170	N	THR	A	788	22.381	80.556	-8.265	1.00	18.19	A
	ATOM	6171	CA	THR	A	788	22.365	80.155	-9.658	1.00	17.22	A
	ATOM	6172	CB	THR	A	788	22.704	81.349	-10.579	1.00	18.00	A
	ATOM	6173	OG1	THR	A	788	21.749	82.399	-10.370	1.00	18.28	A
	ATOM	6174	CG2	THR	A	788	22.669	80.926	-12.044	1.00	18.47	A
10	ATOM	6175	C	THR	A	788	23.398	79.058	-9.886	1.00	15.98	A
	ATOM	6176	O	THR	A	788	24.492	79.096	-9.322	1.00	15.00	A
	ATOM	6177	N	GLU	A	789	23.030	78.074	-10.695	1.00	14.52	A
	ATOM	6178	CA	GLU	A	789	23.937	76.990	-11.045	1.00	14.59	A
	ATOM	6179	CB	GLU	A	789	23.469	75.661	-10.433	1.00	14.05	A
15	ATOM	6180	CG	GLU	A	789	23.440	75.701	-8.906	1.00	14.04	A
	ATOM	6181	CD	GLU	A	789	23.457	74.328	-8.256	1.00	14.08	A
	ATOM	6182	OE1	GLU	A	789	24.222	73.453	-8.724	1.00	13.65	A
	ATOM	6183	OE2	GLU	A	789	22.719	74.136	-7.262	1.00	13.58	A
	ATOM	6184	C	GLU	A	789	23.928	76.939	-12.565	1.00	14.52	A
20	ATOM	6185	O	GLU	A	789	22.884	76.737	-13.186	1.00	14.93	A
	ATOM	6186	N	ILE	A	790	25.094	77.161	-13.160	1.00	13.89	A
	ATOM	6187	CA	ILE	A	790	25.228	77.164	-14.608	1.00	13.95	A
	ATOM	6188	CB	ILE	A	790	26.320	78.148	-15.056	1.00	14.54	A
	ATOM	6189	CG2	ILE	A	790	26.396	78.178	-16.576	1.00	15.34	A
25	ATOM	6190	CG1	ILE	A	790	26.012	79.547	-14.508	1.00	16.25	A
	ATOM	6191	CD1	ILE	A	790	27.135	80.551	-14.712	1.00	18.66	A
	ATOM	6192	C	ILE	A	790	25.574	75.778	-15.134	1.00	14.00	A
	ATOM	6193	O	ILE	A	790	26.532	75.151	-14.680	1.00	13.91	A
	ATOM	6194	N	VAL	A	791	24.791	75.304	-16.094	1.00	13.84	A
30	ATOM	6195	CA	VAL	A	791	25.024	73.991	-16.668	1.00	13.77	A
	ATOM	6196	CB	VAL	A	791	23.811	73.054	-16.417	1.00	14.65	A
	ATOM	6197	CG1	VAL	A	791	22.581	73.575	-17.164	1.00	14.60	A
	ATOM	6198	CG2	VAL	A	791	24.143	71.633	-16.854	1.00	13.66	A
	ATOM	6199	C	VAL	A	791	25.274	74.081	-18.167	1.00	14.13	A
35	ATOM	6200	O	VAL	A	791	24.707	74.936	-18.853	1.00	14.03	A
	ATOM	6201	N	MET	A	792	26.153	73.218	-18.664	1.00	13.29	A
	ATOM	6202	CA	MET	A	792	26.438	73.164	-20.092	1.00	13.85	A
	ATOM	6203	CB	MET	A	792	27.941	73.138	-20.365	1.00	14.34	A
	ATOM	6204	CG	MET	A	792	28.273	72.961	-21.841	1.00	14.06	A
40	ATOM	6205	SD	MET	A	792	30.043	73.066	-22.209	1.00	15.67	A
	ATOM	6206	CE	MET	A	792	30.667	71.618	-21.346	1.00	15.89	A
	ATOM	6207	C	MET	A	792	25.803	71.865	-20.564	1.00	13.88	A
	ATOM	6208	O	MET	A	792	26.139	70.791	-20.067	1.00	13.81	A
	ATOM	6209	N	ARG	A	793	24.884	71.965	-21.518	1.00	14.28	A
45	ATOM	6210	CA	ARG	A	793	24.184	70.788	-22.022	1.00	14.14	A
	ATOM	6211	CB	ARG	A	793	22.674	70.941	-21.766	1.00	14.51	A
	ATOM	6212	CG	ARG	A	793	21.804	69.766	-22.242	1.00	14.54	A
	ATOM	6213	CD	ARG	A	793	20.322	70.029	-21.946	1.00	15.61	A
	ATOM	6214	NE	ARG	A	793	20.062	70.132	-20.511	1.00	16.05	A
50	ATOM	6215	CZ	ARG	A	793	18.974	70.684	-19.982	1.00	16.93	A
	ATOM	6216	NH1	ARG	A	793	18.031	71.190	-20.768	1.00	16.82	A
	ATOM	6217	NH2	ARG	A	793	18.830	70.743	-18.662	1.00	17.05	A
	ATOM	6218	C	ARG	A	793	24.423	70.536	-23.503	1.00	14.27	A
	ATOM	6219	O	ARG	A	793	24.637	71.466	-24.285	1.00	14.21	A
	ATOM	6220	N	LEU	A	794	24.396	69.260	-23.873	1.00	14.02	A
55	ATOM	6221	CA	LEU	A	794	24.556	68.837	-25.257	1.00	14.74	A

5	ATOM	6222	CB	LEU	A	794	25.730	67.857	-25.391	1.00	15.15	A
	ATOM	6223	CG	LEU	A	794	27.138	68.460	-25.460	1.00	15.18	A
	ATOM	6224	CD1	LEU	A	794	28.176	67.441	-25.009	1.00	16.00	A
	ATOM	6225	CD2	LEU	A	794	27.414	68.917	-26.885	1.00	16.18	A
	ATOM	6226	C	LEU	A	794	23.253	68.147	-25.658	1.00	15.38	A
10	ATOM	6227	O	LEU	A	794	22.765	67.270	-24.941	1.00	14.50	A
	ATOM	6228	N	GLU	A	795	22.680	68.561	-26.787	1.00	15.73	A
	ATOM	6229	CA	GLU	A	795	21.437	67.966	-27.274	1.00	16.52	A
	ATOM	6230	CB	GLU	A	795	20.368	69.054	-27.464	1.00	17.12	A
	ATOM	6231	CG	GLU	A	795	20.156	69.921	-26.228	1.00	19.27	A
15	ATOM	6232	CD	GLU	A	795	19.114	71.015	-26.423	1.00	21.04	A
	ATOM	6233	OE1	GLU	A	795	19.073	71.623	-27.515	1.00	22.12	A
	ATOM	6234	OE2	GLU	A	795	18.348	71.281	-25.475	1.00	21.33	A
	ATOM	6235	C	GLU	A	795	21.710	67.244	-28.597	1.00	16.30	A
	ATOM	6236	O	GLU	A	795	22.263	67.829	-29.526	1.00	16.34	A
20	ATOM	6237	N	THR	A	796	21.337	65.967	-28.673	1.00	16.19	A
	ATOM	6238	CA	THR	A	796	21.553	65.181	-29.883	1.00	16.65	A
	ATOM	6239	CB	THR	A	796	22.744	64.211	-29.737	1.00	16.82	A
	ATOM	6240	OG1	THR	A	796	22.345	63.091	-28.932	1.00	16.53	A
	ATOM	6241	CG2	THR	A	796	23.935	64.910	-29.086	1.00	16.74	A
25	ATOM	6242	C	THR	A	796	20.333	64.329	-30.221	1.00	17.22	A
	ATOM	6243	O	THR	A	796	19.332	64.347	-29.509	1.00	17.97	A
	ATOM	6244	N	HIS	A	797	20.443	63.577	-31.312	1.00	19.17	A
	ATOM	6245	CA	HIS	A	797	19.377	62.691	-31.769	1.00	20.27	A
	ATOM	6246	CB	HIS	A	797	19.235	62.775	-33.291	1.00	21.87	A
30	ATOM	6247	CG	HIS	A	797	18.600	64.043	-33.769	1.00	22.65	A
	ATOM	6248	CD2	HIS	A	797	17.956	65.025	-33.097	1.00	22.75	A
	ATOM	6249	ND1	HIS	A	797	18.574	64.407	-35.099	1.00	23.52	A
	ATOM	6250	CE1	HIS	A	797	17.941	65.560	-35.223	1.00	23.34	A
	ATOM	6251	NE2	HIS	A	797	17.556	65.956	-34.023	1.00	22.42	A
35	ATOM	6252	C	HIS	A	797	19.677	61.251	-31.368	1.00	20.49	A
	ATOM	6253	O	HIS	A	797	18.952	60.332	-31.743	1.00	21.41	A
	ATOM	6254	N	ILE	A	798	20.749	61.059	-30.605	1.00	19.36	A
	ATOM	6255	CA	ILE	A	798	21.132	59.724	-30.157	1.00	18.76	A
	ATOM	6256	CB	ILE	A	798	22.422	59.778	-29.302	1.00	18.71	A
40	ATOM	6257	CG2	ILE	A	798	22.770	58.384	-28.786	1.00	17.92	A
	ATOM	6258	CG1	ILE	A	798	23.570	60.333	-30.154	1.00	18.53	A
	ATOM	6259	CD1	ILE	A	798	24.874	60.555	-29.395	1.00	17.95	A
	ATOM	6260	C	ILE	A	798	19.997	59.105	-29.349	1.00	18.42	A
	ATOM	6261	O	ILE	A	798	19.477	59.719	-28.418	1.00	17.56	A
45	ATOM	6262	N	ASP	A	799	19.609	57.888	-29.723	1.00	18.81	A
	ATOM	6263	CA	ASP	A	799	18.522	57.182	-29.056	1.00	18.57	A
	ATOM	6264	CB	ASP	A	799	17.872	56.196	-30.031	1.00	20.01	A
	ATOM	6265	CG	ASP	A	799	16.543	55.678	-29.530	1.00	21.36	A
	ATOM	6266	OD1	ASP	A	799	16.070	54.651	-30.053	1.00	22.33	A
50	ATOM	6267	OD2	ASP	A	799	15.968	56.302	-28.616	1.00	21.98	A
	ATOM	6268	C	ASP	A	799	19.024	56.429	-27.828	1.00	18.37	A
	ATOM	6269	O	ASP	A	799	18.977	55.199	-27.777	1.00	17.79	A
	ATOM	6270	N	SER	A	800	19.493	57.175	-26.834	1.00	17.69	A
	ATOM	6271	CA	SER	A	800	20.023	56.584	-25.610	1.00	17.20	A
55	ATOM	6272	CB	SER	A	800	21.013	57.556	-24.959	1.00	16.54	A
	ATOM	6273	OG	SER	A	800	20.383	58.792	-24.673	1.00	16.23	A
	ATOM	6274	C	SER	A	800	18.947	56.193	-24.597	1.00	16.97	A
	ATOM	6275	O	SER	A	800	19.195	55.375	-23.711	1.00	16.98	A
	ATOM	6276	N	GLY	A	801	17.760	56.780	-24.719	1.00	16.72	A

5	ATOM	6277	CA	GLY	A	801	16.684	56.458	-23.798	1.00	16.49	A
	ATOM	6278	C	GLY	A	801	16.937	56.957	-22.387	1.00	15.93	A
	ATOM	6279	O	GLY	A	801	17.034	58.162	-22.162	1.00	16.54	A
	ATOM	6280	N	ASP	A	802	17.042	56.035	-21.433	1.00	15.86	A
	ATOM	6281	CA	ASP	A	802	17.290	56.402	-20.042	1.00	15.52	A
10	ATOM	6282	CB	ASP	A	802	16.203	55.808	-19.125	1.00	16.28	A
	ATOM	6283	CG	ASP	A	802	16.093	54.290	-19.229	1.00	17.22	A
	ATOM	6284	OD1	ASP	A	802	15.201	53.720	-18.559	1.00	17.37	A
	ATOM	6285	OD2	ASP	A	802	16.884	53.661	-19.967	1.00	17.32	A
	ATOM	6286	C	ASP	A	802	18.672	55.947	-19.571	1.00	15.32	A
15	ATOM	6287	O	ASP	A	802	18.969	55.979	-18.378	1.00	14.86	A
	ATOM	6288	N	ILE	A	803	19.514	55.542	-20.517	1.00	14.31	A
	ATOM	6289	CA	ILE	A	803	20.862	55.069	-20.207	1.00	14.43	A
	ATOM	6290	CB	ILE	A	803	21.166	53.753	-20.968	1.00	14.45	A
	ATOM	6291	CG2	ILE	A	803	22.583	53.274	-20.656	1.00	13.83	A
20	ATOM	6292	CG1	ILE	A	803	20.139	52.681	-20.593	1.00	15.02	A
	ATOM	6293	CD1	ILE	A	803	20.150	52.286	-19.127	1.00	15.71	A
	ATOM	6294	C	ILE	A	803	21.981	56.061	-20.540	1.00	14.06	A
	ATOM	6295	O	ILE	A	803	21.923	56.781	-21.533	1.00	13.86	A
	ATOM	6296	N	PHE	A	804	22.998	56.093	-19.686	1.00	13.59	A
25	ATOM	6297	CA	PHE	A	804	24.166	56.931	-19.915	1.00	13.28	A
	ATOM	6298	CB	PHE	A	804	23.886	58.420	-19.614	1.00	12.58	A
	ATOM	6299	CG	PHE	A	804	23.523	58.726	-18.184	1.00	12.47	A
	ATOM	6300	CD1	PHE	A	804	24.455	59.316	-17.327	1.00	12.56	A
	ATOM	6301	CD2	PHE	A	804	22.231	58.500	-17.714	1.00	12.59	A
30	ATOM	6302	CE1	PHE	A	804	24.100	59.682	-16.025	1.00	12.22	A
	ATOM	6303	CE2	PHE	A	804	21.866	58.859	-16.416	1.00	12.70	A
	ATOM	6304	CZ	PHE	A	804	22.804	59.455	-15.569	1.00	13.23	A
	ATOM	6305	C	PHE	A	804	25.304	56.377	-19.074	1.00	13.15	A
	ATOM	6306	O	PHE	A	804	25.084	55.547	-18.196	1.00	13.40	A
35	ATOM	6307	N	TYR	A	805	26.523	56.804	-19.366	1.00	13.12	A
	ATOM	6308	CA	TYR	A	805	27.674	56.305	-18.633	1.00	12.37	A
	ATOM	6309	CB	TYR	A	805	28.549	55.447	-19.552	1.00	12.55	A
	ATOM	6310	CG	TYR	A	805	27.851	54.219	-20.112	1.00	14.19	A
	ATOM	6311	CD1	TYR	A	805	26.860	54.335	-21.090	1.00	14.01	A
40	ATOM	6312	CE1	TYR	A	805	26.225	53.203	-21.615	1.00	14.29	A
	ATOM	6313	CD2	TYR	A	805	28.190	52.941	-19.667	1.00	14.18	A
	ATOM	6314	CE2	TYR	A	805	27.560	51.803	-20.183	1.00	14.39	A
	ATOM	6315	CZ	TYR	A	805	26.583	51.941	-21.156	1.00	14.54	A
	ATOM	6316	OH	TYR	A	805	25.973	50.820	-21.675	1.00	14.20	A
45	ATOM	6317	C	TYR	A	805	28.509	57.431	-18.050	1.00	12.21	A
	ATOM	6318	O	TYR	A	805	28.649	58.494	-18.657	1.00	11.85	A
	ATOM	6319	N	THR	A	806	29.045	57.189	-16.858	1.00	11.34	A
	ATOM	6320	CA	THR	A	806	29.898	58.151	-16.180	1.00	11.39	A
	ATOM	6321	CB	THR	A	806	29.140	58.881	-15.055	1.00	11.82	A
50	ATOM	6322	OG1	THR	A	806	28.769	57.946	-14.032	1.00	12.67	A
	ATOM	6323	CG2	THR	A	806	27.877	59.535	-15.614	1.00	10.84	A
	ATOM	6324	C	THR	A	806	31.058	57.343	-15.605	1.00	11.45	A
	ATOM	6325	O	THR	A	806	30.934	56.133	-15.407	1.00	11.87	A
	ATOM	6326	N	ASP	A	807	32.189	57.990	-15.352	1.00	10.78	A
55	ATOM	6327	CA	ASP	A	807	33.327	57.262	-14.822	1.00	10.94	A
	ATOM	6328	CB	ASP	A	807	34.630	57.740	-15.470	1.00	10.56	A
	ATOM	6329	CG	ASP	A	807	35.086	59.091	-14.953	1.00	10.21	A
	ATOM	6330	OD1	ASP	A	807	36.235	59.183	-14.480	1.00	11.32	A
	ATOM	6331	OD2	ASP	A	807	34.308	60.061	-15.026	1.00	11.19	A

5	ATOM	6332	C	ASP	A	807	33.438	57.385	-13.314	1.00	10.70	A
	ATOM	6333	O	ASP	A	807	32.855	58.278	-12.699	1.00	9.93	A
	ATOM	6334	N	LEU	A	808	34.182	56.456	-12.729	1.00	10.38	A
	ATOM	6335	CA	LEU	A	808	34.418	56.452	-11.299	1.00	10.47	A
	ATOM	6336	CB	LEU	A	808	33.963	55.124	-10.676	1.00	10.91	A
	ATOM	6337	CG	LEU	A	808	32.445	54.927	-10.532	1.00	10.80	A
	ATOM	6338	CD1	LEU	A	808	32.126	53.458	-10.277	1.00	12.22	A
	ATOM	6339	CD2	LEU	A	808	31.917	55.782	-9.391	1.00	11.26	A
10	ATOM	6340	C	LEU	A	808	35.910	56.655	-11.087	1.00	10.25	A
	ATOM	6341	O	LEU	A	808	36.722	55.806	-11.462	1.00	10.25	A
	ATOM	6342	N	ASN	A	809	36.261	57.810	-10.527	1.00	9.42	A
	ATOM	6343	CA	ASN	A	809	37.647	58.149	-10.219	1.00	9.53	A
15	ATOM	6344	CB	ASN	A	809	38.121	57.262	-9.073	1.00	8.78	A
	ATOM	6345	CG	ASN	A	809	37.128	57.226	-7.933	1.00	8.98	A
	ATOM	6346	OD1	ASN	A	809	37.110	58.114	-7.075	1.00	11.42	A
	ATOM	6347	ND2	ASN	A	809	36.272	56.215	-7.934	1.00	7.45	A
	ATOM	6348	C	ASN	A	809	38.623	58.046	-11.386	1.00	9.64	A
20	ATOM	6349	O	ASN	A	809	39.807	57.785	-11.177	1.00	9.79	A
	ATOM	6350	N	GLY	A	810	38.133	58.261	-12.604	1.00	10.08	A
	ATOM	6351	CA	GLY	A	810	38.997	58.182	-13.774	1.00	10.96	A
	ATOM	6352	C	GLY	A	810	39.586	56.797	-13.984	1.00	12.28	A
	ATOM	6353	O	GLY	A	810	40.611	56.633	-14.659	1.00	13.07	A
	ATOM	6354	N	LEU	A	811	38.923	55.795	-13.419	1.00	11.50	A
25	ATOM	6355	CA	LEU	A	811	39.384	54.414	-13.501	1.00	11.55	A
	ATOM	6356	CB	LEU	A	811	39.490	53.835	-12.085	1.00	11.82	A
	ATOM	6357	CG	LEU	A	811	39.816	52.344	-11.968	1.00	13.81	A
	ATOM	6358	CD1	LEU	A	811	41.218	52.097	-12.510	1.00	14.31	A
30	ATOM	6359	CD2	LEU	A	811	39.706	51.896	-10.515	1.00	13.02	A
	ATOM	6360	C	LEU	A	811	38.511	53.487	-14.344	1.00	11.64	A
	ATOM	6361	O	LEU	A	811	39.022	52.644	-15.086	1.00	12.98	A
	ATOM	6362	N	GLN	A	812	37.197	53.647	-14.235	1.00	10.70	A
	ATOM	6363	CA	GLN	A	812	36.261	52.779	-14.942	1.00	11.31	A
35	ATOM	6364	CB	GLN	A	812	35.885	51.613	-14.031	1.00	12.03	A
	ATOM	6365	CG	GLN	A	812	35.287	52.098	-12.693	1.00	12.84	A
	ATOM	6366	CD	GLN	A	812	34.982	50.970	-11.722	1.00	14.63	A
	ATOM	6367	OE1	GLN	A	812	33.988	50.258	-11.867	1.00	15.09	A
	ATOM	6368	NE2	GLN	A	812	35.843	50.804	-10.723	1.00	14.88	A
40	ATOM	6369	C	GLN	A	812	34.995	53.534	-15.292	1.00	11.14	A
	ATOM	6370	O	GLN	A	812	34.692	54.549	-14.670	1.00	11.87	A
	ATOM	6371	N	PHE	A	813	34.259	53.037	-16.282	1.00	10.54	A
	ATOM	6372	CA	PHE	A	813	32.999	53.652	-16.666	1.00	10.98	A
45	ATOM	6373	CB	PHE	A	813	32.957	53.952	-18.170	1.00	11.42	A
	ATOM	6374	CG	PHE	A	813	33.707	55.197	-18.544	1.00	11.91	A
	ATOM	6375	CD1	PHE	A	813	35.098	55.202	-18.578	1.00	11.51	A
	ATOM	6376	CD2	PHE	A	813	33.025	56.385	-18.795	1.00	12.99	A
	ATOM	6377	CE1	PHE	A	813	35.803	56.372	-18.851	1.00	11.25	A
50	ATOM	6378	CE2	PHE	A	813	33.722	57.562	-19.070	1.00	12.39	A
	ATOM	6379	CZ	PHE	A	813	35.114	57.550	-19.096	1.00	11.92	A
	ATOM	6380	C	PHE	A	813	31.876	52.714	-16.261	1.00	11.59	A
	ATOM	6381	O	PHE	A	813	31.889	51.510	-16.573	1.00	11.72	A
	ATOM	6382	N	ILE	A	814	30.914	53.269	-15.539	1.00	11.18	A
55	ATOM	6383	CA	ILE	A	814	29.799	52.493	-15.037	1.00	11.06	A
	ATOM	6384	CB	ILE	A	814	29.722	52.625	-13.494	1.00	11.10	A
	ATOM	6385	CG2	ILE	A	814	29.416	54.066	-13.103	1.00	11.45	A
	ATOM	6386	CG1	ILE	A	814	28.669	51.664	-12.931	1.00	11.83	A

5	ATOM	6387	CD1	ILE	A	814	28.662	51.592	-11.402	1.00	11.69	A
	ATOM	6388	C	ILE	A	814	28.487	52.933	-15.681	1.00	11.26	A
	ATOM	6389	O	ILE	A	814	28.261	54.118	-15.923	1.00	10.34	A
	ATOM	6390	N	LYS	A	815	27.629	51.960	-15.967	1.00	11.46	A
	ATOM	6391	CA	LYS	A	815	26.343	52.232	-16.593	1.00	11.88	A
10	ATOM	6392	CB	LYS	A	815	25.751	50.926	-17.135	1.00	12.12	A
	ATOM	6393	CG	LYS	A	815	24.392	51.047	-17.815	1.00	14.24	A
	ATOM	6394	CD	LYS	A	815	23.997	49.696	-18.420	1.00	16.46	A
	ATOM	6395	CE	LYS	A	815	22.678	49.769	-19.164	1.00	19.21	A
	ATOM	6396	NZ	LYS	A	815	22.321	48.454	-19.780	1.00	20.77	A
15	ATOM	6397	C	LYS	A	815	25.384	52.879	-15.603	1.00	11.66	A
	ATOM	6398	O	LYS	A	815	25.252	52.423	-14.468	1.00	12.12	A
	ATOM	6399	N	ARG	A	816	24.733	53.953	-16.043	1.00	11.64	A
	ATOM	6400	CA	ARG	A	816	23.768	54.689	-15.232	1.00	11.48	A
	ATOM	6401	CB	ARG	A	816	24.129	56.178	-15.165	1.00	11.74	A
20	ATOM	6402	CG	ARG	A	816	25.517	56.492	-14.641	1.00	12.05	A
	ATOM	6403	CD	ARG	A	816	25.687	55.935	-13.245	1.00	12.44	A
	ATOM	6404	NE	ARG	A	816	26.852	56.488	-12.560	1.00	11.57	A
	ATOM	6405	CZ	ARG	A	816	27.222	56.119	-11.339	1.00	12.04	A
	ATOM	6406	NH1	ARG	A	816	26.517	55.201	-10.691	1.00	10.85	A
25	ATOM	6407	NH2	ARG	A	816	28.281	56.672	-10.764	1.00	10.30	A
	ATOM	6408	C	ARG	A	816	22.400	54.586	-15.884	1.00	11.32	A
	ATOM	6409	O	ARG	A	816	22.300	54.506	-17.105	1.00	10.94	A
	ATOM	6410	N	ARG	A	817	21.351	54.582	-15.073	1.00	11.27	A
	ATOM	6411	CA	ARG	A	817	20.000	54.551	-15.615	1.00	12.22	A
30	ATOM	6412	CB	ARG	A	817	19.293	53.210	-15.334	1.00	12.89	A
	ATOM	6413	CG	ARG	A	817	17.827	53.209	-15.802	1.00	13.67	A
	ATOM	6414	CD	ARG	A	817	17.111	51.865	-15.632	1.00	14.62	A
	ATOM	6415	NE	ARG	A	817	17.626	50.837	-16.532	1.00	15.59	A
	ATOM	6416	CZ	ARG	A	817	18.366	49.804	-16.144	1.00	16.50	A
35	ATOM	6417	NH1	ARG	A	817	18.682	49.654	-14.864	1.00	17.15	A
	ATOM	6418	NH2	ARG	A	817	18.793	48.919	-17.035	1.00	16.79	A
	ATOM	6419	C	ARG	A	817	19.213	55.687	-14.981	1.00	12.55	A
	ATOM	6420	O	ARG	A	817	19.037	55.724	-13.764	1.00	12.99	A
	ATOM	6421	N	ARG	A	818	18.778	56.636	-15.805	1.00	12.88	A
40	ATOM	6422	CA	ARG	A	818	17.983	57.752	-15.319	1.00	13.50	A
	ATOM	6423	CB	ARG	A	818	17.625	58.699	-16.469	1.00	13.33	A
	ATOM	6424	CG	ARG	A	818	16.925	59.978	-16.019	1.00	14.76	A
	ATOM	6425	CD	ARG	A	818	16.277	60.714	-17.186	1.00	15.79	A
	ATOM	6426	NE	ARG	A	818	14.988	60.122	-17.540	1.00	18.26	A
45	ATOM	6427	CZ	ARG	A	818	14.714	59.543	-18.707	1.00	18.39	A
	ATOM	6428	NH1	ARG	A	818	15.638	59.467	-19.659	1.00	16.54	A
	ATOM	6429	NH2	ARG	A	818	13.508	59.034	-18.920	1.00	19.11	A
	ATOM	6430	C	ARG	A	818	16.705	57.143	-14.754	1.00	13.51	A
	ATOM	6431	O	ARG	A	818	16.060	56.330	-15.421	1.00	14.71	A
50	ATOM	6432	N	LEU	A	819	16.350	57.524	-13.532	1.00	13.42	A
	ATOM	6433	CA	LEU	A	819	15.146	57.007	-12.884	1.00	14.74	A
	ATOM	6434	CB	LEU	A	819	15.511	56.302	-11.571	1.00	14.98	A
	ATOM	6435	CG	LEU	A	819	16.430	55.080	-11.695	1.00	15.76	A
	ATOM	6436	CD1	LEU	A	819	16.851	54.606	-10.312	1.00	15.83	A
55	ATOM	6437	CD2	LEU	A	819	15.714	53.972	-12.456	1.00	15.44	A
	ATOM	6438	C	LEU	A	819	14.180	58.150	-12.604	1.00	15.35	A
	ATOM	6439	O	LEU	A	819	14.431	58.995	-11.745	1.00	15.18	A
	ATOM	6440	N	ASP	A	820	13.068	58.176	-13.329	1.00	16.48	A
	ATOM	6441	CA	ASP	A	820	12.100	59.238	-13.138	1.00	17.08	A

5	ATOM	6442	CB	ASP	A	820	11.111	59.271	-14.306	1.00	18.98	A
	ATOM	6443	CG	ASP	A	820	11.798	59.547	-15.635	1.00	20.10	A
	ATOM	6444	OD1	ASP	A	820	12.762	60.341	-15.650	1.00	21.45	A
	ATOM	6445	OD2	ASP	A	820	11.377	58.980	-16.665	1.00	22.62	A
	ATOM	6446	C	ASP	A	820	11.375	59.106	-11.805	1.00	17.02	A
10	ATOM	6447	O	ASP	A	820	10.710	60.042	-11.360	1.00	16.56	A
	ATOM	6448	N	LYS	A	821	11.516	57.953	-11.157	1.00	16.60	A
	ATOM	6449	CA	LYS	A	821	10.875	57.756	-9.862	1.00	16.60	A
	ATOM	6450	CB	LYS	A	821	10.794	56.265	-9.505	1.00	17.21	A
	ATOM	6451	CG	LYS	A	821	12.139	55.579	-9.317	1.00	17.29	A
15	ATOM	6452	CD	LYS	A	821	11.970	54.073	-9.157	1.00	16.45	A
	ATOM	6453	CE	LYS	A	821	13.320	53.374	-9.053	1.00	16.98	A
	ATOM	6454	NZ	LYS	A	821	13.184	51.888	-9.114	1.00	15.59	A
	ATOM	6455	C	LYS	A	821	11.667	58.516	-8.798	1.00	16.66	A
	ATOM	6456	O	LYS	A	821	11.233	58.638	-7.655	1.00	16.84	A
20	ATOM	6457	N	LEU	A	822	12.831	59.030	-9.187	1.00	15.85	A
	ATOM	6458	CA	LEU	A	822	13.667	59.804	-8.274	1.00	15.43	A
	ATOM	6459	CB	LEU	A	822	15.088	59.235	-8.234	1.00	14.68	A
	ATOM	6460	CG	LEU	A	822	15.220	57.795	-7.723	1.00	14.77	A
	ATOM	6461	CD1	LEU	A	822	16.684	57.370	-7.747	1.00	14.13	A
25	ATOM	6462	CD2	LEU	A	822	14.657	57.704	-6.308	1.00	13.61	A
	ATOM	6463	C	LEU	A	822	13.712	61.257	-8.742	1.00	15.52	A
	ATOM	6464	O	LEU	A	822	13.538	61.538	-9.928	1.00	15.57	A
	ATOM	6465	N	PRO	A	823	13.940	62.202	-7.815	1.00	15.92	A
	ATOM	6466	CD	PRO	A	823	14.103	62.039	-6.360	1.00	15.59	A
30	ATOM	6467	CA	PRO	A	823	13.999	63.617	-8.200	1.00	15.73	A
	ATOM	6468	CB	PRO	A	823	14.021	64.342	-6.857	1.00	15.56	A
	ATOM	6469	CG	PRO	A	823	14.721	63.362	-5.955	1.00	16.99	A
	ATOM	6470	C	PRO	A	823	15.221	63.927	-9.070	1.00	15.83	A
	ATOM	6471	O	PRO	A	823	16.194	63.176	-9.086	1.00	16.38	A
35	ATOM	6472	N	LEU	A	824	15.157	65.043	-9.788	1.00	15.04	A
	ATOM	6473	CA	LEU	A	824	16.227	65.461	-10.687	1.00	14.32	A
	ATOM	6474	CB	LEU	A	824	15.976	66.908	-11.132	1.00	14.06	A
	ATOM	6475	CG	LEU	A	824	16.746	67.440	-12.343	1.00	13.30	A
	ATOM	6476	CD1	LEU	A	824	15.995	68.633	-12.939	1.00	13.69	A
40	ATOM	6477	CD2	LEU	A	824	18.165	67.827	-11.931	1.00	12.50	A
	ATOM	6478	C	LEU	A	824	17.638	65.333	-10.101	1.00	14.34	A
	ATOM	6479	O	LEU	A	824	18.513	64.717	-10.713	1.00	13.76	A
	ATOM	6480	N	GLN	A	825	17.850	65.903	-8.917	1.00	13.89	A
	ATOM	6481	CA	GLN	A	825	19.164	65.876	-8.273	1.00	14.21	A
45	ATOM	6482	CB	GLN	A	825	19.124	66.650	-6.952	1.00	13.86	A
	ATOM	6483	CG	GLN	A	825	18.152	66.091	-5.922	1.00	14.09	A
	ATOM	6484	CD	GLN	A	825	16.755	66.678	-6.045	1.00	13.72	A
	ATOM	6485	OE1	GLN	A	825	16.340	67.096	-7.123	1.00	14.70	A
	ATOM	6486	NE2	GLN	A	825	16.019	66.697	-4.939	1.00	12.85	A
50	ATOM	6487	C	GLN	A	825	19.711	64.473	-8.011	1.00	14.39	A
	ATOM	6488	O	GLN	A	825	20.928	64.283	-7.905	1.00	13.92	A
	ATOM	6489	N	ALA	A	826	18.819	63.494	-7.891	1.00	13.71	A
	ATOM	6490	CA	ALA	A	826	19.241	62.120	-7.640	1.00	13.79	A
	ATOM	6491	CB	ALA	A	826	18.052	61.283	-7.168	1.00	14.08	A
55	ATOM	6492	C	ALA	A	826	19.842	61.510	-8.903	1.00	13.92	A
	ATOM	6493	O	ALA	A	826	20.633	60.563	-8.836	1.00	14.14	A
	ATOM	6494	N	ASN	A	827	19.465	62.051	-10.058	1.00	13.45	A
	ATOM	6495	CA	ASN	A	827	19.974	61.541	-11.321	1.00	12.85	A
	ATOM	6496	CB	ASN	A	827	18.910	61.690	-12.412	1.00	14.30	A

5	ATOM	6497	CG	ASN	A	827	17.765	60.704	-12.234	1.00	15.77	A
	ATOM	6498	OD1	ASN	A	827	17.962	59.491	-12.318	1.00	15.57	A
	ATOM	6499	ND2	ASN	A	827	16.567	61.218	-11.972	1.00	16.77	A
	ATOM	6500	C	ASN	A	827	21.290	62.200	-11.726	1.00	12.33	A
	ATOM	6501	O	ASN	A	827	21.813	61.956	-12.812	1.00	11.17	A
10	ATOM	6502	N	TYR	A	828	21.820	63.046	-10.846	1.00	12.25	A
	ATOM	6503	CA	TYR	A	828	23.109	63.677	-11.098	1.00	12.12	A
	ATOM	6504	CB	TYR	A	828	23.200	65.057	-10.438	1.00	12.01	A
	ATOM	6505	CG	TYR	A	828	23.230	66.205	-11.434	1.00	12.71	A
	ATOM	6506	CD1	TYR	A	828	22.160	66.432	-12.297	1.00	11.49	A
15	ATOM	6507	CE1	TYR	A	828	22.191	67.472	-13.230	1.00	12.16	A
	ATOM	6508	CD2	TYR	A	828	24.338	67.051	-11.522	1.00	11.99	A
	ATOM	6509	CE2	TYR	A	828	24.380	68.092	-12.450	1.00	12.59	A
	ATOM	6510	CZ	TYR	A	828	23.306	68.297	-13.300	1.00	11.81	A
	ATOM	6511	OH	TYR	A	828	23.356	69.311	-14.231	1.00	12.90	A
20	ATOM	6512	C	TYR	A	828	24.151	62.747	-10.485	1.00	11.84	A
	ATOM	6513	O	TYR	A	828	23.953	62.220	-9.387	1.00	11.86	A
	ATOM	6514	N	TYR	A	829	25.246	62.540	-11.208	1.00	11.25	A
	ATOM	6515	CA	TYR	A	829	26.330	61.674	-10.759	1.00	11.17	A
	ATOM	6516	CB	TYR	A	829	26.365	60.376	-11.576	1.00	11.21	A
25	ATOM	6517	CG	TYR	A	829	25.203	59.451	-11.315	1.00	11.79	A
	ATOM	6518	CD1	TYR	A	829	24.042	59.516	-12.087	1.00	11.45	A
	ATOM	6519	CE1	TYR	A	829	22.945	58.691	-11.809	1.00	12.46	A
	ATOM	6520	CD2	TYR	A	829	25.248	58.540	-10.261	1.00	11.44	A
	ATOM	6521	CE2	TYR	A	829	24.165	57.718	-9.973	1.00	12.38	A
30	ATOM	6522	CZ	TYR	A	829	23.017	57.797	-10.745	1.00	12.11	A
	ATOM	6523	OH	TYR	A	829	21.944	56.993	-10.433	1.00	12.60	A
	ATOM	6524	C	TYR	A	829	27.676	62.365	-10.916	1.00	10.97	A
	ATOM	6525	O	TYR	A	829	27.799	63.357	-11.630	1.00	10.60	A
	ATOM	6526	N	PRO	A	830	28.708	61.846	-10.239	1.00	10.67	A
35	ATOM	6527	CD	PRO	A	830	28.721	60.751	-9.255	1.00	10.48	A
	ATOM	6528	CA	PRO	A	830	30.030	62.464	-10.363	1.00	10.76	A
	ATOM	6529	CB	PRO	A	830	30.889	61.657	-9.386	1.00	11.38	A
	ATOM	6530	CG	PRO	A	830	29.906	61.114	-8.396	1.00	11.76	A
	ATOM	6531	C	PRO	A	830	30.534	62.284	-11.796	1.00	10.70	A
40	ATOM	6532	O	PRO	A	830	30.317	61.230	-12.400	1.00	10.23	A
	ATOM	6533	N	ILE	A	831	31.179	63.309	-12.348	1.00	10.28	A
	ATOM	6534	CA	ILE	A	831	31.765	63.194	-13.680	1.00	10.20	A
	ATOM	6535	CB	ILE	A	831	31.182	64.207	-14.704	1.00	10.32	A
	ATOM	6536	CG2	ILE	A	831	31.702	63.865	-16.095	1.00	10.76	A
45	ATOM	6537	CG1	ILE	A	831	29.648	64.174	-14.698	1.00	10.68	A
	ATOM	6538	CD1	ILE	A	831	29.035	62.797	-15.006	1.00	10.20	A
	ATOM	6539	C	ILE	A	831	33.240	63.524	-13.458	1.00	10.52	A
	ATOM	6540	O	ILE	A	831	33.725	64.578	-13.870	1.00	10.07	A
	ATOM	6541	N	PRO	A	832	33.974	62.622	-12.786	1.00	10.57	A
50	ATOM	6542	CD	PRO	A	832	33.527	61.378	-12.135	1.00	11.09	A
	ATOM	6543	CA	PRO	A	832	35.393	62.875	-12.525	1.00	10.76	A
	ATOM	6544	CB	PRO	A	832	35.807	61.697	-11.632	1.00	10.28	A
	ATOM	6545	CG	PRO	A	832	34.817	60.615	-11.981	1.00	11.64	A
	ATOM	6546	C	PRO	A	832	36.286	63.046	-13.744	1.00	10.48	A
55	ATOM	6547	O	PRO	A	832	37.273	63.773	-13.678	1.00	11.05	A
	ATOM	6548	N	SER	A	833	35.954	62.395	-14.856	1.00	10.53	A
	ATOM	6549	CA	SER	A	833	36.783	62.546	-16.049	1.00	10.75	A
	ATOM	6550	CB	SER	A	833	37.996	61.609	-15.981	1.00	11.44	A
	ATOM	6551	OG	SER	A	833	37.643	60.273	-16.285	1.00	13.55	A

5	ATOM	6552	C	SER	A	833	36.051	62.330	-17.371	1.00	10.87	A
	ATOM	6553	O	SER	A	833	36.581	62.672	-18.425	1.00	10.60	A
	ATOM	6554	N	GLY	A	834	34.845	61.769	-17.327	1.00	10.57	A
	ATOM	6555	CA	GLY	A	834	34.120	61.548	-18.569	1.00	10.76	A
	ATOM	6556	C	GLY	A	834	32.723	60.968	-18.454	1.00	10.80	A
10	ATOM	6557	O	GLY	A	834	32.341	60.395	-17.430	1.00	10.04	A
	ATOM	6558	N	MET	A	835	31.959	61.116	-19.532	1.00	11.25	A
	ATOM	6559	CA	MET	A	835	30.591	60.621	-19.588	1.00	11.48	A
	ATOM	6560	CB	MET	A	835	29.642	61.643	-18.952	1.00	12.22	A
	ATOM	6561	CG	MET	A	835	29.507	62.945	-19.744	1.00	11.77	A
15	ATOM	6562	SD	MET	A	835	28.685	64.277	-18.832	1.00	13.73	A
	ATOM	6563	CE	MET	A	835	27.082	63.543	-18.510	1.00	12.36	A
	ATOM	6564	C	MET	A	835	30.216	60.421	-21.056	1.00	11.78	A
	ATOM	6565	O	MET	A	835	30.779	61.071	-21.945	1.00	11.10	A
	ATOM	6566	N	PHE	A	836	29.277	59.519	-21.318	1.00	11.62	A
20	ATOM	6567	CA	PHE	A	836	28.855	59.306	-22.693	1.00	12.03	A
	ATOM	6568	CB	PHE	A	836	29.915	58.499	-23.481	1.00	11.91	A
	ATOM	6569	CG	PHE	A	836	30.074	57.049	-23.058	1.00	14.00	A
	ATOM	6570	CD1	PHE	A	836	29.200	56.066	-23.525	1.00	14.04	A
	ATOM	6571	CD2	PHE	A	836	31.144	56.659	-22.253	1.00	14.26	A
25	ATOM	6572	CE1	PHE	A	836	29.392	54.715	-23.202	1.00	16.21	A
	ATOM	6573	CE2	PHE	A	836	31.347	55.308	-21.921	1.00	15.05	A
	ATOM	6574	CZ	PHE	A	836	30.468	54.335	-22.398	1.00	15.74	A
	ATOM	6575	C	PHE	A	836	27.488	58.670	-22.820	1.00	12.54	A
	ATOM	6576	O	PHE	A	836	26.971	58.083	-21.869	1.00	11.76	A
30	ATOM	6577	N	ILE	A	837	26.887	58.848	-23.993	1.00	11.64	A
	ATOM	6578	CA	ILE	A	837	25.593	58.260	-24.303	1.00	12.13	A
	ATOM	6579	CB	ILE	A	837	24.466	59.312	-24.403	1.00	11.63	A
	ATOM	6580	CG2	ILE	A	837	24.032	59.742	-23.007	1.00	11.57	A
	ATOM	6581	CG1	ILE	A	837	24.920	60.489	-25.270	1.00	11.04	A
35	ATOM	6582	CD1	ILE	A	837	23.771	61.408	-25.698	1.00	10.76	A
	ATOM	6583	C	ILE	A	837	25.758	57.599	-25.660	1.00	12.23	A
	ATOM	6584	O	ILE	A	837	26.612	58.006	-26.457	1.00	11.97	A
	ATOM	6585	N	GLU	A	838	24.955	56.579	-25.928	1.00	13.26	A
	ATOM	6586	CA	GLU	A	838	25.063	55.887	-27.203	1.00	13.21	A
40	ATOM	6587	CB	GLU	A	838	26.232	54.901	-27.153	1.00	14.34	A
	ATOM	6588	CG	GLU	A	838	25.978	53.751	-26.166	1.00	15.15	A
	ATOM	6589	CD	GLU	A	838	27.091	52.715	-26.120	1.00	16.72	A
	ATOM	6590	OE1	GLU	A	838	26.937	51.720	-25.382	1.00	18.45	A
	ATOM	6591	OE2	GLU	A	838	28.114	52.884	-26.812	1.00	17.74	A
45	ATOM	6592	C	GLU	A	838	23.807	55.100	-27.538	1.00	14.05	A
	ATOM	6593	O	GLU	A	838	22.977	54.827	-26.671	1.00	13.44	A
	ATOM	6594	N	ASP	A	839	23.655	54.773	-28.816	1.00	14.77	A
	ATOM	6595	CA	ASP	A	839	22.561	53.913	-29.240	1.00	15.54	A
	ATOM	6596	CB	ASP	A	839	21.494	54.633	-30.085	1.00	15.80	A
50	ATOM	6597	CG	ASP	A	839	22.061	55.405	-31.260	1.00	15.71	A
	ATOM	6598	OD1	ASP	A	839	23.091	55.001	-31.838	1.00	15.80	A
	ATOM	6599	OD2	ASP	A	839	21.434	56.424	-31.618	1.00	17.81	A
	ATOM	6600	C	ASP	A	839	23.267	52.823	-30.028	1.00	16.22	A
	ATOM	6601	O	ASP	A	839	24.471	52.624	-29.859	1.00	15.94	A
55	ATOM	6602	N	ALA	A	840	22.545	52.114	-30.882	1.00	16.73	A
	ATOM	6603	CA	ALA	A	840	23.160	51.042	-31.645	1.00	17.26	A
	ATOM	6604	CB	ALA	A	840	22.083	50.279	-32.418	1.00	18.36	A
	ATOM	6605	C	ALA	A	840	24.258	51.500	-32.603	1.00	17.43	A
	ATOM	6606	O	ALA	A	840	25.200	50.749	-32.871	1.00	17.52	A

5	ATOM	6607	N	ASN	A	841	24.164	52.733	-33.096	1.00	16.94	A
	ATOM	6608	CA	ASN	A	841	25.136	53.215	-34.076	1.00	17.30	A
	ATOM	6609	CB	ASN	A	841	24.406	53.557	-35.377	1.00	18.50	A
	ATOM	6610	CG	ASN	A	841	23.592	52.402	-35.900	1.00	20.17	A
	ATOM	6611	OD1	ASN	A	841	24.122	51.317	-36.126	1.00	21.04	A
10	ATOM	6612	ND2	ASN	A	841	22.295	52.625	-36.092	1.00	19.98	A
	ATOM	6613	C	ASN	A	841	26.021	54.402	-33.725	1.00	16.82	A
	ATOM	6614	O	ASN	A	841	27.129	54.520	-34.254	1.00	16.18	A
	ATOM	6615	N	THR	A	842	25.542	55.278	-32.850	1.00	16.36	A
	ATOM	6616	CA	THR	A	842	26.298	56.479	-32.517	1.00	16.16	A
15	ATOM	6617	CB	THR	A	842	25.564	57.724	-33.075	1.00	16.66	A
	ATOM	6618	OG1	THR	A	842	25.204	57.490	-34.444	1.00	17.07	A
	ATOM	6619	CG2	THR	A	842	26.452	58.958	-32.999	1.00	16.18	A
	ATOM	6620	C	THR	A	842	26.547	56.699	-31.031	1.00	15.76	A
	ATOM	6621	O	THR	A	842	25.713	56.369	-30.190	1.00	16.36	A
20	ATOM	6622	N	ARG	A	843	27.704	57.271	-30.718	1.00	14.94	A
	ATOM	6623	CA	ARG	A	843	28.057	57.573	-29.335	1.00	13.57	A
	ATOM	6624	CB	ARG	A	843	29.056	56.557	-28.775	1.00	13.32	A
	ATOM	6625	CG	ARG	A	843	29.577	56.928	-27.375	1.00	12.73	A
	ATOM	6626	CD	ARG	A	843	30.764	56.075	-26.924	1.00	12.83	A
25	ATOM	6627	NE	ARG	A	843	30.395	54.696	-26.606	1.00	12.99	A
	ATOM	6628	CZ	ARG	A	843	31.216	53.820	-26.029	1.00	14.10	A
	ATOM	6629	NH1	ARG	A	843	32.452	54.180	-25.705	1.00	13.39	A
	ATOM	6630	NH2	ARG	A	843	30.809	52.581	-25.772	1.00	13.79	A
	ATOM	6631	C	ARG	A	843	28.685	58.954	-29.266	1.00	12.96	A
30	ATOM	6632	O	ARG	A	843	29.402	59.368	-30.177	1.00	12.57	A
	ATOM	6633	N	LEU	A	844	28.396	59.666	-28.185	1.00	12.37	A
	ATOM	6634	CA	LEU	A	844	28.969	60.985	-27.967	1.00	12.14	A
	ATOM	6635	CB	LEU	A	844	27.890	62.072	-27.967	1.00	11.38	A
	ATOM	6636	CG	LEU	A	844	28.458	63.488	-27.823	1.00	11.36	A
35	ATOM	6637	CD1	LEU	A	844	29.375	63.778	-29.005	1.00	11.45	A
	ATOM	6638	CD2	LEU	A	844	27.334	64.513	-27.757	1.00	11.60	A
	ATOM	6639	C	LEU	A	844	29.624	60.922	-26.598	1.00	11.63	A
	ATOM	6640	O	LEU	A	844	28.958	60.622	-25.601	1.00	11.42	A
	ATOM	6641	N	THR	A	845	30.926	61.187	-26.553	1.00	11.41	A
40	ATOM	6642	CA	THR	A	845	31.662	61.150	-25.295	1.00	11.95	A
	ATOM	6643	CB	THR	A	845	32.833	60.144	-25.357	1.00	12.35	A
	ATOM	6644	OG1	THR	A	845	32.335	58.849	-25.721	1.00	13.45	A
	ATOM	6645	CG2	THR	A	845	33.537	60.051	-24.003	1.00	12.11	A
	ATOM	6646	C	THR	A	845	32.244	62.520	-24.965	1.00	11.55	A
45	ATOM	6647	O	THR	A	845	32.867	63.162	-25.808	1.00	11.72	A
	ATOM	6648	N	LEU	A	846	32.037	62.962	-23.732	1.00	11.76	A
	ATOM	6649	CA	LEU	A	846	32.572	64.240	-23.290	1.00	11.18	A
	ATOM	6650	CB	LEU	A	846	31.454	65.127	-22.730	1.00	10.76	A
	ATOM	6651	CG	LEU	A	846	31.881	66.481	-22.148	1.00	12.31	A
50	ATOM	6652	CD1	LEU	A	846	32.435	67.361	-23.263	1.00	12.08	A
	ATOM	6653	CD2	LEU	A	846	30.693	67.164	-21.471	1.00	12.32	A
	ATOM	6654	C	LEU	A	846	33.584	63.924	-22.196	1.00	10.28	A
	ATOM	6655	O	LEU	A	846	33.226	63.361	-21.161	1.00	9.21	A
	ATOM	6656	N	LEU	A	847	34.847	64.261	-22.443	1.00	10.60	A
55	ATOM	6657	CA	LEU	A	847	35.917	64.023	-21.474	1.00	10.37	A
	ATOM	6658	CB	LEU	A	847	37.187	63.511	-22.175	1.00	10.15	A
	ATOM	6659	CG	LEU	A	847	37.166	62.164	-22.922	1.00	9.45	A
	ATOM	6660	CD1	LEU	A	847	36.463	61.116	-22.070	1.00	8.42	A
	ATOM	6661	CD2	LEU	A	847	36.465	62.318	-24.268	1.00	9.43	A

5	ATOM	6662	C	LEU	A	847	36.213	65.350	-20.774	1.00	11.19	A
	ATOM	6663	O	LEU	A	847	36.141	66.412	-21.401	1.00	10.50	A
	ATOM	6664	N	THR	A	848	36.557	65.291	-19.487	1.00	9.84	A
	ATOM	6665	CA	THR	A	848	36.826	66.507	-18.722	1.00	10.43	A
	ATOM	6666	CB	THR	A	848	35.864	66.642	-17.535	1.00	11.02	A
	ATOM	6667	OG1	THR	A	848	36.281	65.757	-16.485	1.00	12.33	A
	ATOM	6668	CG2	THR	A	848	34.448	66.292	-17.953	1.00	11.23	A
	ATOM	6669	C	THR	A	848	38.233	66.590	-18.147	1.00	10.77	A
10	ATOM	6670	O	THR	A	848	38.909	65.574	-17.958	1.00	10.97	A
	ATOM	6671	N	GLY	A	849	38.659	67.820	-17.869	1.00	10.37	A
	ATOM	6672	CA	GLY	A	849	39.968	68.042	-17.289	1.00	10.72	A
	ATOM	6673	C	GLY	A	849	39.792	68.412	-15.828	1.00	10.76	A
15	ATOM	6674	O	GLY	A	849	40.719	68.881	-15.167	1.00	10.54	A
	ATOM	6675	N	GLN	A	850	38.580	68.198	-15.328	1.00	10.62	A
	ATOM	6676	CA	GLN	A	850	38.250	68.497	-13.942	1.00	10.79	A
	ATOM	6677	CB	GLN	A	850	38.049	70.008	-13.758	1.00	10.45	A
	ATOM	6678	CG	GLN	A	850	36.893	70.617	-14.578	1.00	10.58	A
	ATOM	6679	CD	GLN	A	850	37.197	70.722	-16.060	1.00	11.77	A
20	ATOM	6680	OE1	GLN	A	850	38.292	71.135	-16.453	1.00	12.48	A
	ATOM	6681	NE2	GLN	A	850	36.220	70.365	-16.898	1.00	10.17	A
	ATOM	6682	C	GLN	A	850	36.969	67.764	-13.552	1.00	11.10	A
	ATOM	6683	O	GLN	A	850	36.101	67.530	-14.394	1.00	10.49	A
25	ATOM	6684	N	PRO	A	851	36.838	67.380	-12.270	1.00	10.84	A
	ATOM	6685	CD	PRO	A	851	37.835	67.430	-11.185	1.00	10.05	A
	ATOM	6686	CA	PRO	A	851	35.624	66.678	-11.839	1.00	10.83	A
	ATOM	6687	CB	PRO	A	851	36.051	66.010	-10.534	1.00	10.06	A
	ATOM	6688	CG	PRO	A	851	37.021	67.017	-9.960	1.00	10.19	A
	ATOM	6689	C	PRO	A	851	34.484	67.673	-11.637	1.00	11.55	A
30	ATOM	6690	O	PRO	A	851	34.668	68.732	-11.021	1.00	10.88	A
	ATOM	6691	N	LEU	A	852	33.316	67.327	-12.171	1.00	11.38	A
	ATOM	6692	CA	LEU	A	852	32.122	68.164	-12.075	1.00	11.58	A
	ATOM	6693	CB	LEU	A	852	32.015	69.075	-13.305	1.00	11.68	A
	ATOM	6694	CG	LEU	A	852	33.136	70.099	-13.523	1.00	11.56	A
35	ATOM	6695	CD1	LEU	A	852	33.028	70.713	-14.916	1.00	12.15	A
	ATOM	6696	CD2	LEU	A	852	33.038	71.184	-12.458	1.00	11.06	A
	ATOM	6697	C	LEU	A	852	30.902	67.247	-12.012	1.00	11.91	A
	ATOM	6698	O	LEU	A	852	31.016	66.044	-12.247	1.00	12.75	A
	ATOM	6699	N	GLY	A	853	29.739	67.807	-11.694	1.00	11.21	A
40	ATOM	6700	CA	GLY	A	853	28.537	66.994	-11.624	1.00	11.60	A
	ATOM	6701	C	GLY	A	853	27.792	66.992	-12.949	1.00	11.73	A
	ATOM	6702	O	GLY	A	853	27.819	67.980	-13.682	1.00	11.22	A
	ATOM	6703	N	GLY	A	854	27.116	65.891	-13.265	1.00	11.53	A
45	ATOM	6704	CA	GLY	A	854	26.398	65.840	-14.528	1.00	12.12	A
	ATOM	6705	C	GLY	A	854	25.351	64.753	-14.623	1.00	12.05	A
	ATOM	6706	O	GLY	A	854	25.157	63.980	-13.684	1.00	11.99	A
	ATOM	6707	N	SER	A	855	24.680	64.686	-15.770	1.00	12.94	A
	ATOM	6708	CA	SER	A	855	23.634	63.689	-15.976	1.00	13.86	A
	ATOM	6709	CB	SER	A	855	22.441	64.003	-15.065	1.00	14.27	A
50	ATOM	6710	OG	SER	A	855	21.402	63.043	-15.195	1.00	14.40	A
	ATOM	6711	C	SER	A	855	23.162	63.680	-17.423	1.00	14.27	A
	ATOM	6712	O	SER	A	855	23.716	64.374	-18.279	1.00	13.52	A
	ATOM	6713	N	SER	A	856	22.143	62.863	-17.675	1.00	14.72	A
55	ATOM	6714	CA	SER	A	856	21.492	62.752	-18.978	1.00	14.69	A
	ATOM	6715	CB	SER	A	856	21.838	61.431	-19.665	1.00	15.13	A
	ATOM	6716	OG	SER	A	856	21.175	61.330	-20.915	1.00	15.73	A

5	ATOM	6717	C	SER	A	856	20.025	62.750	-18.560	1.00	15.42	A
	ATOM	6718	O	SER	A	856	19.469	61.702	-18.216	1.00	14.82	A
	ATOM	6719	N	LEU	A	857	19.404	63.926	-18.570	1.00	14.83	A
	ATOM	6720	CA	LEU	A	857	18.023	64.041	-18.121	1.00	15.04	A
	ATOM	6721	CB	LEU	A	857	17.787	65.444	-17.555	1.00	15.79	A
	ATOM	6722	CG	LEU	A	857	18.656	65.766	-16.335	1.00	15.73	A
	ATOM	6723	CD1	LEU	A	857	18.423	67.199	-15.903	1.00	16.46	A
	ATOM	6724	CD2	LEU	A	857	18.325	64.802	-15.193	1.00	16.82	A
10	ATOM	6725	C	LEU	A	857	16.959	63.698	-19.153	1.00	15.01	A
	ATOM	6726	O	LEU	A	857	15.774	63.648	-18.831	1.00	16.21	A
	ATOM	6727	N	ALA	A	858	17.386	63.455	-20.384	1.00	14.17	A
	ATOM	6728	CA	ALA	A	858	16.476	63.095	-21.463	1.00	15.27	A
15	ATOM	6729	CB	ALA	A	858	15.840	64.353	-22.080	1.00	14.55	A
	ATOM	6730	C	ALA	A	858	17.287	62.348	-22.508	1.00	15.22	A
	ATOM	6731	O	ALA	A	858	18.491	62.561	-22.631	1.00	15.05	A
	ATOM	6732	N	SER	A	859	16.628	61.461	-23.247	1.00	15.43	A
	ATOM	6733	CA	SER	A	859	17.300	60.690	-24.280	1.00	15.40	A
20	ATOM	6734	CB	SER	A	859	16.272	59.883	-25.085	1.00	15.64	A
	ATOM	6735	OG	SER	A	859	16.898	59.143	-26.118	1.00	15.79	A
	ATOM	6736	C	SER	A	859	18.067	61.626	-25.208	1.00	15.90	A
	ATOM	6737	O	SER	A	859	17.551	62.673	-25.612	1.00	16.40	A
	ATOM	6738	N	GLY	A	860	19.300	61.249	-25.531	1.00	15.03	A
25	ATOM	6739	CA	GLY	A	860	20.128	62.051	-26.416	1.00	14.88	A
	ATOM	6740	C	GLY	A	860	20.837	63.235	-25.778	1.00	14.74	A
	ATOM	6741	O	GLY	A	860	21.556	63.971	-26.461	1.00	14.83	A
	ATOM	6742	N	GLU	A	861	20.657	63.427	-24.477	1.00	14.40	A
	ATOM	6743	CA	GLU	A	861	21.296	64.553	-23.802	1.00	14.66	A
30	ATOM	6744	CB	GLU	A	861	20.274	65.343	-22.982	1.00	15.09	A
	ATOM	6745	CG	GLU	A	861	19.167	66.015	-23.771	1.00	15.73	A
	ATOM	6746	CD	GLU	A	861	18.274	66.866	-22.881	1.00	16.26	A
	ATOM	6747	OE1	GLU	A	861	18.499	66.896	-21.648	1.00	16.77	A
	ATOM	6748	OE2	GLU	A	861	17.349	67.507	-23.410	1.00	16.56	A
35	ATOM	6749	C	GLU	A	861	22.441	64.196	-22.864	1.00	14.50	A
	ATOM	6750	O	GLU	A	861	22.521	63.086	-22.338	1.00	13.85	A
	ATOM	6751	N	LEU	A	862	23.321	65.171	-22.668	1.00	14.08	A
	ATOM	6752	CA	LEU	A	862	24.443	65.069	-21.740	1.00	14.26	A
	ATOM	6753	CB	LEU	A	862	25.767	64.772	-22.452	1.00	13.73	A
40	ATOM	6754	CG	LEU	A	862	26.100	63.391	-23.028	1.00	13.69	A
	ATOM	6755	CD1	LEU	A	862	27.463	63.459	-23.706	1.00	12.07	A
	ATOM	6756	CD2	LEU	A	862	26.113	62.342	-21.933	1.00	13.40	A
	ATOM	6757	C	LEU	A	862	24.516	66.467	-21.156	1.00	14.16	A
	ATOM	6758	O	LEU	A	862	24.308	67.449	-21.870	1.00	14.09	A
45	ATOM	6759	N	GLU	A	863	24.773	66.574	-19.862	1.00	13.64	A
	ATOM	6760	CA	GLU	A	863	24.902	67.893	-19.272	1.00	13.16	A
	ATOM	6761	CB	GLU	A	863	23.535	68.453	-18.860	1.00	13.14	A
	ATOM	6762	CG	GLU	A	863	23.007	68.027	-17.508	1.00	12.61	A
	ATOM	6763	CD	GLU	A	863	21.683	68.701	-17.191	1.00	13.43	A
50	ATOM	6764	OE1	GLU	A	863	21.529	69.210	-16.061	1.00	14.53	A
	ATOM	6765	OE2	GLU	A	863	20.792	68.719	-18.071	1.00	14.31	A
	ATOM	6766	C	GLU	A	863	25.851	67.819	-18.094	1.00	12.83	A
	ATOM	6767	O	GLU	A	863	25.918	66.807	-17.394	1.00	11.84	A
	ATOM	6768	N	ILE	A	864	26.600	68.894	-17.891	1.00	12.45	A
55	ATOM	6769	CA	ILE	A	864	27.574	68.942	-16.814	1.00	12.34	A
	ATOM	6770	CB	ILE	A	864	28.953	68.477	-17.355	1.00	13.29	A
	ATOM	6771	CG2	ILE	A	864	29.406	69.390	-18.497	1.00	13.38	A

5	ATOM	6772	CG1	ILE	A	864	29.979	68.411	-16.226	1.00	12.87	A
	ATOM	6773	CD1	ILE	A	864	31.255	67.696	-16.632	1.00	15.03	A
	ATOM	6774	C	ILE	A	864	27.626	70.363	-16.245	1.00	12.28	A
	ATOM	6775	O	ILE	A	864	27.749	71.339	-16.989	1.00	12.71	A
	ATOM	6776	N	MET	A	865	27.506	70.466	-14.925	1.00	12.05	A
10	ATOM	6777	CA	MET	A	865	27.504	71.751	-14.229	1.00	12.26	A
	ATOM	6778	CB	MET	A	865	27.077	71.548	-12.773	1.00	12.43	A
	ATOM	6779	CG	MET	A	865	26.485	72.787	-12.127	1.00	11.69	A
	ATOM	6780	SD	MET	A	865	24.884	73.169	-12.872	1.00	13.86	A
	ATOM	6781	CE	MET	A	865	23.850	71.943	-12.046	1.00	12.21	A
15	ATOM	6782	C	MET	A	865	28.872	72.436	-14.273	1.00	12.23	A
	ATOM	6783	O	MET	A	865	29.903	71.792	-14.082	1.00	11.54	A
	ATOM	6784	N	GLN	A	866	28.869	73.748	-14.501	1.00	12.20	A
	ATOM	6785	CA	GLN	A	866	30.106	74.520	-14.592	1.00	12.17	A
	ATOM	6786	CB	GLN	A	866	29.973	75.568	-15.694	1.00	12.07	A
20	ATOM	6787	CG	GLN	A	866	29.638	74.959	-17.037	1.00	13.16	A
	ATOM	6788	CD	GLN	A	866	30.648	73.908	-17.455	1.00	13.74	A
	ATOM	6789	OE1	GLN	A	866	31.806	74.221	-17.750	1.00	13.62	A
	ATOM	6790	NE2	GLN	A	866	30.219	72.648	-17.468	1.00	12.85	A
	ATOM	6791	C	GLN	A	866	30.501	75.186	-13.279	1.00	12.32	A
25	ATOM	6792	O	GLN	A	866	31.672	75.190	-12.910	1.00	12.03	A
	ATOM	6793	N	ASP	A	867	29.523	75.772	-12.595	1.00	12.35	A
	ATOM	6794	CA	ASP	A	867	29.759	76.405	-11.303	1.00	12.58	A
	ATOM	6795	CB	ASP	A	867	30.532	77.722	-11.450	1.00	12.46	A
	ATOM	6796	CG	ASP	A	867	31.204	78.156	-10.147	1.00	12.23	A
30	ATOM	6797	OD1	ASP	A	867	31.032	77.471	-9.115	1.00	11.85	A
	ATOM	6798	OD2	ASP	A	867	31.912	79.182	-10.157	1.00	12.76	A
	ATOM	6799	C	ASP	A	867	28.409	76.665	-10.664	1.00	13.58	A
	ATOM	6800	O	ASP	A	867	27.371	76.624	-11.334	1.00	12.90	A
	ATOM	6801	N	ARG	A	868	28.427	76.923	-9.363	1.00	13.40	A
35	ATOM	6802	CA	ARG	A	868	27.210	77.183	-8.618	1.00	14.19	A
	ATOM	6803	CB	ARG	A	868	26.683	75.872	-8.023	1.00	13.52	A
	ATOM	6804	CG	ARG	A	868	27.697	75.114	-7.172	1.00	13.57	A
	ATOM	6805	CD	ARG	A	868	27.390	73.611	-7.182	1.00	13.30	A
	ATOM	6806	NE	ARG	A	868	26.035	73.331	-6.723	1.00	12.07	A
40	ATOM	6807	CZ	ARG	A	868	25.714	73.036	-5.467	1.00	12.96	A
	ATOM	6808	NH1	ARG	A	868	26.655	72.970	-4.534	1.00	11.71	A
	ATOM	6809	NH2	ARG	A	868	24.445	72.822	-5.141	1.00	11.83	A
	ATOM	6810	C	ARG	A	868	27.513	78.189	-7.519	1.00	14.32	A
	ATOM	6811	O	ARG	A	868	28.536	78.087	-6.840	1.00	14.96	A
45	ATOM	6812	N	ARG	A	869	26.627	79.167	-7.363	1.00	14.46	A
	ATOM	6813	CA	ARG	A	869	26.777	80.213	-6.352	1.00	14.99	A
	ATOM	6814	CB	ARG	A	869	26.938	81.578	-7.037	1.00	15.61	A
	ATOM	6815	CG	ARG	A	869	27.263	82.745	-6.104	1.00	16.25	A
	ATOM	6816	CD	ARG	A	869	27.492	84.039	-6.890	1.00	18.29	A
50	ATOM	6817	NE	ARG	A	869	27.678	85.202	-6.019	1.00	19.10	A
	ATOM	6818	CZ	ARG	A	869	28.805	85.495	-5.376	1.00	19.20	A
	ATOM	6819	NH1	ARG	A	869	29.870	84.718	-5.500	1.00	19.53	A
	ATOM	6820	NH2	ARG	A	869	28.865	86.569	-4.597	1.00	19.46	A
	ATOM	6821	C	ARG	A	869	25.497	80.164	-5.521	1.00	15.62	A
55	ATOM	6822	O	ARG	A	869	24.416	80.479	-6.015	1.00	15.11	A
	ATOM	6823	N	LEU	A	870	25.629	79.749	-4.265	1.00	16.14	A
	ATOM	6824	CA	LEU	A	870	24.490	79.609	-3.362	1.00	17.85	A
	ATOM	6825	CB	LEU	A	870	24.396	78.153	-2.915	1.00	18.19	A
	ATOM	6826	CG	LEU	A	870	24.411	77.209	-4.122	1.00	19.60	A

5	ATOM	6827	CD1	LEU	A	870	24.773	75.815	-3.688	1.00	20.54	A
	ATOM	6828	CD2	LEU	A	870	23.056	77.244	-4.818	1.00	20.32	A
	ATOM	6829	C	LEU	A	870	24.583	80.530	-2.148	1.00	18.52	A
	ATOM	6830	O	LEU	A	870	25.576	80.523	-1.419	1.00	18.31	A
	ATOM	6831	N	ALA	A	871	23.529	81.308	-1.926	1.00	19.42	A
10	ATOM	6832	CA	ALA	A	871	23.496	82.259	-0.823	1.00	21.24	A
	ATOM	6833	CB	ALA	A	871	22.452	83.341	-1.109	1.00	20.93	A
	ATOM	6834	C	ALA	A	871	23.244	81.658	0.556	1.00	22.09	A
	ATOM	6835	O	ALA	A	871	23.668	82.223	1.563	1.00	23.73	A
	ATOM	6836	N	SER	A	872	22.567	80.518	0.617	1.00	21.91	A
15	ATOM	6837	CA	SER	A	872	22.272	79.922	1.914	1.00	21.65	A
	ATOM	6838	CB	SER	A	872	20.769	79.658	2.034	1.00	23.19	A
	ATOM	6839	OG	SER	A	872	20.338	78.730	1.055	1.00	26.58	A
	ATOM	6840	C	SER	A	872	23.036	78.646	2.239	1.00	20.75	A
	ATOM	6841	O	SER	A	872	23.617	78.005	1.364	1.00	19.55	A
20	ATOM	6842	N	ASP	A	873	23.031	78.301	3.522	1.00	19.61	A
	ATOM	6843	CA	ASP	A	873	23.689	77.104	4.029	1.00	19.17	A
	ATOM	6844	CB	ASP	A	873	24.112	77.329	5.482	1.00	19.04	A
	ATOM	6845	CG	ASP	A	873	24.577	76.059	6.156	1.00	19.71	A
	ATOM	6846	OD1	ASP	A	873	23.811	75.502	6.971	1.00	19.93	A
25	ATOM	6847	OD2	ASP	A	873	25.706	75.612	5.863	1.00	20.20	A
	ATOM	6848	C	ASP	A	873	22.696	75.948	3.945	1.00	18.75	A
	ATOM	6849	O	ASP	A	873	21.498	76.154	4.135	1.00	18.42	A
	ATOM	6850	N	ASP	A	874	23.183	74.742	3.660	1.00	17.54	A
	ATOM	6851	CA	ASP	A	874	22.299	73.585	3.551	1.00	17.33	A
30	ATOM	6852	CB	ASP	A	874	22.635	72.762	2.297	1.00	16.01	A
	ATOM	6853	CG	ASP	A	874	24.122	72.502	2.138	1.00	16.32	A
	ATOM	6854	OD1	ASP	A	874	24.901	72.857	3.052	1.00	15.05	A
	ATOM	6855	OD2	ASP	A	874	24.506	71.936	1.091	1.00	16.01	A
	ATOM	6856	C	ASP	A	874	22.248	72.681	4.788	1.00	17.97	A
35	ATOM	6857	O	ASP	A	874	22.029	71.476	4.685	1.00	18.00	A
	ATOM	6858	N	GLU	A	875	22.460	73.284	5.953	1.00	18.50	A
	ATOM	6859	CA	GLU	A	875	22.382	72.597	7.238	1.00	19.21	A
	ATOM	6860	CB	GLU	A	875	20.910	72.346	7.585	1.00	21.54	A
	ATOM	6861	CG	GLU	A	875	20.038	73.592	7.559	1.00	25.14	A
40	ATOM	6862	CD	GLU	A	875	18.589	73.289	7.885	1.00	27.52	A
	ATOM	6863	OE1	GLU	A	875	18.310	72.853	9.020	1.00	30.03	A
	ATOM	6864	OE2	GLU	A	875	17.727	73.479	7.003	1.00	30.33	A
	ATOM	6865	C	GLU	A	875	23.150	71.295	7.451	1.00	18.48	A
	ATOM	6866	O	GLU	A	875	22.627	70.367	8.070	1.00	17.86	A
45	ATOM	6867	N	ARG	A	876	24.380	71.208	6.956	1.00	17.24	A
	ATOM	6868	CA	ARG	A	876	25.161	69.997	7.180	1.00	16.73	A
	ATOM	6869	CB	ARG	A	876	25.517	69.320	5.848	1.00	16.77	A
	ATOM	6870	CG	ARG	A	876	24.312	68.684	5.133	1.00	15.41	A
	ATOM	6871	CD	ARG	A	876	23.606	67.656	6.027	1.00	15.04	A
50	ATOM	6872	NE	ARG	A	876	22.518	66.949	5.348	1.00	14.38	A
	ATOM	6873	CZ	ARG	A	876	21.355	67.497	4.999	1.00	14.98	A
	ATOM	6874	NH1	ARG	A	876	21.107	68.776	5.259	1.00	12.60	A
	ATOM	6875	NH2	ARG	A	876	20.435	66.759	4.389	1.00	14.55	A
	ATOM	6876	C	ARG	A	876	26.420	70.301	7.995	1.00	16.61	A
55	ATOM	6877	O	ARG	A	876	27.312	69.460	8.120	1.00	16.38	A
	ATOM	6878	N	GLY	A	877	26.483	71.511	8.552	1.00	16.19	A
	ATOM	6879	CA	GLY	A	877	27.619	71.887	9.375	1.00	16.15	A
	ATOM	6880	C	GLY	A	877	28.605	72.908	8.829	1.00	15.84	A
	ATOM	6881	O	GLY	A	877	29.426	73.435	9.586	1.00	16.37	A

5	ATOM	6882	N	LEU A 878	28.537	73.198	7.534	1.00	16.26	A
	ATOM	6883	CA	LEU A 878	29.460	74.157	6.931	1.00	16.37	A
	ATOM	6884	CB	LEU A 878	29.297	74.159	5.410	1.00	15.68	A
	ATOM	6885	CG	LEU A 878	30.187	75.111	4.605	1.00	15.99	A
	ATOM	6886	CD1	LEU A 878	31.649	74.925	4.994	1.00	15.30	A
10	ATOM	6887	CD2	LEU A 878	29.992	74.846	3.123	1.00	14.75	A
	ATOM	6888	C	LEU A 878	29.271	75.569	7.490	1.00	17.09	A
	ATOM	6889	O	LEU A 878	30.240	76.308	7.672	1.00	16.41	A
	ATOM	6890	N	GLY A 879	28.023	75.942	7.756	1.00	17.19	A
	ATOM	6891	CA	GLY A 879	27.757	77.257	8.315	1.00	18.15	A
15	ATOM	6892	C	GLY A 879	27.833	78.419	7.342	1.00	18.91	A
	ATOM	6893	O	GLY A 879	27.929	79.574	7.760	1.00	19.29	A
	ATOM	6894	N	GLN A 880	27.798	78.122	6.047	1.00	18.66	A
	ATOM	6895	CA	GLN A 880	27.838	79.162	5.028	1.00	18.43	A
	ATOM	6896	CB	GLN A 880	29.244	79.774	4.910	1.00	18.45	A
20	ATOM	6897	CG	GLN A 880	30.361	78.774	4.586	1.00	18.67	A
	ATOM	6898	CD	GLN A 880	31.589	79.432	3.963	1.00	18.32	A
	ATOM	6899	OE1	GLN A 880	31.611	79.730	2.764	1.00	20.47	A
	ATOM	6900	NE2	GLN A 880	32.609	79.670	4.776	1.00	16.53	A
	ATOM	6901	C	GLN A 880	27.424	78.615	3.670	1.00	18.38	A
25	ATOM	6902	O	GLN A 880	27.389	77.399	3.455	1.00	18.09	A
	ATOM	6903	N	GLY A 881	27.095	79.527	2.763	1.00	18.10	A
	ATOM	6904	CA	GLY A 881	26.730	79.129	1.421	1.00	17.08	A
	ATOM	6905	C	GLY A 881	28.014	79.145	0.613	1.00	16.83	A
	ATOM	6906	O	GLY A 881	29.110	79.108	1.175	1.00	16.96	A
30	ATOM	6907	N	VAL A 882	27.887	79.203	-0.705	1.00	15.89	A
	ATOM	6908	CA	VAL A 882	29.045	79.236	-1.578	1.00	15.83	A
	ATOM	6909	CB	VAL A 882	29.014	78.059	-2.570	1.00	15.45	A
	ATOM	6910	CG1	VAL A 882	30.229	78.105	-3.476	1.00	15.71	A
	ATOM	6911	CG2	VAL A 882	28.974	76.746	-1.800	1.00	15.61	A
35	ATOM	6912	C	VAL A 882	28.998	80.558	-2.330	1.00	15.96	A
	ATOM	6913	O	VAL A 882	28.308	80.684	-3.338	1.00	15.41	A
	ATOM	6914	N	LEU A 883	29.727	81.542	-1.815	1.00	16.91	A
	ATOM	6915	CA	LEU A 883	29.761	82.872	-2.415	1.00	17.79	A
	ATOM	6916	CB	LEU A 883	29.092	83.874	-1.467	1.00	18.67	A
40	ATOM	6917	CG	LEU A 883	27.586	83.717	-1.225	1.00	19.39	A
	ATOM	6918	CD1	LEU A 883	27.161	84.532	-0.011	1.00	20.65	A
	ATOM	6919	CD2	LEU A 883	26.829	84.178	-2.453	1.00	20.59	A
	ATOM	6920	C	LEU A 883	31.184	83.331	-2.726	1.00	17.96	A
	ATOM	6921	O	LEU A 883	31.420	84.518	-2.953	1.00	19.51	A
45	ATOM	6922	N	ASP A 884	32.126	82.393	-2.745	1.00	17.04	A
	ATOM	6923	CA	ASP A 884	33.521	82.716	-3.016	1.00	16.75	A
	ATOM	6924	CB	ASP A 884	34.422	82.110	-1.934	1.00	17.01	A
	ATOM	6925	CG	ASP A 884	34.187	80.623	-1.738	1.00	17.63	A
	ATOM	6926	OD1	ASP A 884	34.839	80.044	-0.842	1.00	17.95	A
50	ATOM	6927	OD2	ASP A 884	33.358	80.035	-2.471	1.00	16.72	A
	ATOM	6928	C	ASP A 884	33.996	82.269	-4.395	1.00	16.25	A
	ATOM	6929	O	ASP A 884	35.171	81.958	-4.590	1.00	16.24	A
	ATOM	6930	N	ASN A 885	33.073	82.252	-5.350	1.00	15.54	A
	ATOM	6931	CA	ASN A 885	33.380	81.857	-6.719	1.00	15.55	A
55	ATOM	6932	CB	ASN A 885	32.129	81.978	-7.584	1.00	15.27	A
	ATOM	6933	CG	ASN A 885	30.959	81.217	-7.014	1.00	16.04	A
	ATOM	6934	OD1	ASN A 885	30.708	80.069	-7.383	1.00	17.31	A
	ATOM	6935	ND2	ASN A 885	30.244	81.846	-6.089	1.00	14.69	A
	ATOM	6936	C	ASN A 885	34.464	82.737	-7.316	1.00	15.81	A

5	ATOM	6937	O	ASN	A	885	34.593	83.910	-6.964	1.00	15.21	A
	ATOM	6938	N	LYS	A	886	35.234	82.163	-8.231	1.00	15.55	A
	ATOM	6939	CA	LYS	A	886	36.291	82.891	-8.911	1.00	16.47	A
	ATOM	6940	CB	LYS	A	886	37.616	82.746	-8.154	1.00	18.07	A
	ATOM	6941	CG	LYS	A	886	38.108	81.316	-8.023	1.00	18.63	A
10	ATOM	6942	CD	LYS	A	886	39.241	81.199	-7.009	1.00	20.71	A
	ATOM	6943	CE	LYS	A	886	40.446	82.032	-7.408	1.00	20.48	A
	ATOM	6944	NZ	LYS	A	886	41.570	81.853	-6.454	1.00	21.54	A
	ATOM	6945	C	LYS	A	886	36.402	82.305	-10.311	1.00	15.79	A
	ATOM	6946	O	LYS	A	886	36.057	81.143	-10.535	1.00	16.23	A
15	ATOM	6947	N	PRO	A	887	36.870	83.104	-11.280	1.00	15.53	A
	ATOM	6948	CD	PRO	A	887	37.247	84.527	-11.189	1.00	15.01	A
	ATOM	6949	CA	PRO	A	887	37.003	82.611	-12.652	1.00	14.09	A
	ATOM	6950	CB	PRO	A	887	37.711	83.762	-13.363	1.00	15.12	A
	ATOM	6951	CG	PRO	A	887	37.187	84.967	-12.629	1.00	15.47	A
20	ATOM	6952	C	PRO	A	887	37.793	81.305	-12.740	1.00	13.98	A
	ATOM	6953	O	PRO	A	887	38.849	81.160	-12.125	1.00	14.06	A
	ATOM	6954	N	VAL	A	888	37.261	80.351	-13.497	1.00	12.52	A
	ATOM	6955	CA	VAL	A	888	37.927	79.073	-13.687	1.00	12.09	A
	ATOM	6956	CB	VAL	A	888	37.300	77.955	-12.802	1.00	12.98	A
25	ATOM	6957	CG1	VAL	A	888	35.794	77.879	-13.026	1.00	13.02	A
	ATOM	6958	CG2	VAL	A	888	37.959	76.609	-13.117	1.00	12.38	A
	ATOM	6959	C	VAL	A	888	37.833	78.680	-15.155	1.00	12.38	A
	ATOM	6960	O	VAL	A	888	36.821	78.940	-15.815	1.00	12.49	A
	ATOM	6961	N	LEU	A	889	38.898	78.077	-15.670	1.00	11.73	A
30	ATOM	6962	CA	LEU	A	889	38.918	77.638	-17.056	1.00	11.82	A
	ATOM	6963	CB	LEU	A	889	40.252	77.982	-17.726	1.00	12.37	A
	ATOM	6964	CG	LEU	A	889	40.314	77.579	-19.208	1.00	12.93	A
	ATOM	6965	CD1	LEU	A	889	39.392	78.489	-20.017	1.00	13.51	A
	ATOM	6966	CD2	LEU	A	889	41.745	77.675	-19.728	1.00	14.04	A
35	ATOM	6967	C	LEU	A	889	38.712	76.129	-17.114	1.00	11.67	A
	ATOM	6968	O	LEU	A	889	39.629	75.365	-16.818	1.00	11.61	A
	ATOM	6969	N	HIS	A	890	37.503	75.708	-17.475	1.00	11.59	A
	ATOM	6970	CA	HIS	A	890	37.195	74.286	-17.595	1.00	11.80	A
	ATOM	6971	CB	HIS	A	890	35.699	74.024	-17.405	1.00	11.62	A
40	ATOM	6972	CG	HIS	A	890	35.227	74.185	-15.995	1.00	12.11	A
	ATOM	6973	CD2	HIS	A	890	34.057	74.648	-15.495	1.00	11.32	A
	ATOM	6974	ND1	HIS	A	890	35.981	73.797	-14.909	1.00	12.14	A
	ATOM	6975	CE1	HIS	A	890	35.296	74.014	-13.800	1.00	12.02	A
	ATOM	6976	NE2	HIS	A	890	34.125	74.530	-14.128	1.00	12.08	A
45	ATOM	6977	C	HIS	A	890	37.582	73.832	-18.991	1.00	11.45	A
	ATOM	6978	O	HIS	A	890	37.374	74.565	-19.957	1.00	11.89	A
	ATOM	6979	N	ILE	A	891	38.129	72.625	-19.105	1.00	11.16	A
	ATOM	6980	CA	ILE	A	891	38.527	72.109	-20.409	1.00	10.51	A
	ATOM	6981	CB	ILE	A	891	40.065	72.024	-20.529	1.00	9.62	A
50	ATOM	6982	CG2	ILE	A	891	40.674	73.405	-20.275	1.00	10.29	A
	ATOM	6983	CG1	ILE	A	891	40.626	71.020	-19.515	1.00	9.60	A
	ATOM	6984	CD1	ILE	A	891	42.118	70.735	-19.709	1.00	9.63	A
	ATOM	6985	C	ILE	A	891	37.910	70.740	-20.685	1.00	10.45	A
	ATOM	6986	O	ILE	A	891	37.677	69.956	-19.764	1.00	11.02	A
55	ATOM	6987	N	TYR	A	892	37.644	70.467	-21.959	1.00	9.88	A
	ATOM	6988	CA	TYR	A	892	37.034	69.204	-22.374	1.00	10.43	A
	ATOM	6989	CB	TYR	A	892	35.499	69.319	-22.415	1.00	10.07	A
	ATOM	6990	CG	TYR	A	892	34.838	70.000	-21.247	1.00	10.62	A
	ATOM	6991	CD1	TYR	A	892	34.810	71.395	-21.142	1.00	9.84	A

5	ATOM	6992	CE1	TYR	A	892	34.193	72.021	-20.056	1.00	10.41	A
	ATOM	6993	CD2	TYR	A	892	34.234	69.249	-20.241	1.00	10.00	A
	ATOM	6994	CE2	TYR	A	892	33.620	69.859	-19.159	1.00	11.35	A
	ATOM	6995	CZ	TYR	A	892	33.601	71.242	-19.068	1.00	10.30	A
	ATOM	6996	OH	TYR	A	892	32.989	71.830	-17.986	1.00	10.40	A
10	ATOM	6997	C	TYR	A	892	37.446	68.806	-23.781	1.00	10.21	A
	ATOM	6998	O	TYR	A	892	38.067	69.576	-24.505	1.00	9.47	A
	ATOM	6999	N	ARG	A	893	37.082	67.580	-24.151	1.00	11.39	A
	ATOM	7000	CA	ARG	A	893	37.275	67.069	-25.507	1.00	11.89	A
	ATOM	7001	CB	ARG	A	893	38.353	65.978	-25.595	1.00	11.65	A
15	ATOM	7002	CG	ARG	A	893	39.800	66.473	-25.503	1.00	12.03	A
	ATOM	7003	CD	ARG	A	893	40.146	67.534	-26.559	1.00	12.81	A
	ATOM	7004	NE	ARG	A	893	40.179	67.020	-27.929	1.00	13.22	A
	ATOM	7005	CZ	ARG	A	893	41.094	66.177	-28.402	1.00	13.50	A
	ATOM	7006	NH1	ARG	A	893	42.072	65.734	-27.620	1.00	13.17	A
20	ATOM	7007	NH2	ARG	A	893	41.037	65.782	-29.666	1.00	13.35	A
	ATOM	7008	C	ARG	A	893	35.901	66.470	-25.809	1.00	12.56	A
	ATOM	7009	O	ARG	A	893	35.315	65.801	-24.951	1.00	12.29	A
	ATOM	7010	N	LEU	A	894	35.371	66.740	-26.999	1.00	12.89	A
	ATOM	7011	CA	LEU	A	894	34.061	66.224	-27.387	1.00	13.29	A
25	ATOM	7012	CB	LEU	A	894	33.136	67.373	-27.812	1.00	14.11	A
	ATOM	7013	CG	LEU	A	894	31.689	66.956	-28.119	1.00	13.84	A
	ATOM	7014	CD1	LEU	A	894	31.050	66.397	-26.859	1.00	15.01	A
	ATOM	7015	CD2	LEU	A	894	30.885	68.139	-28.631	1.00	14.69	A
	ATOM	7016	C	LEU	A	894	34.254	65.245	-28.541	1.00	13.05	A
30	ATOM	7017	O	LEU	A	894	34.643	65.635	-29.642	1.00	13.01	A
	ATOM	7018	N	VAL	A	895	33.976	63.972	-28.278	1.00	13.11	A
	ATOM	7019	CA	VAL	A	895	34.166	62.927	-29.273	1.00	14.21	A
	ATOM	7020	CB	VAL	A	895	35.048	61.789	-28.711	1.00	14.02	A
	ATOM	7021	CG1	VAL	A	895	35.395	60.802	-29.822	1.00	13.83	A
35	ATOM	7022	CG2	VAL	A	895	36.304	62.361	-28.072	1.00	14.27	A
	ATOM	7023	C	VAL	A	895	32.884	62.281	-29.788	1.00	14.24	A
	ATOM	7024	O	VAL	A	895	32.204	61.573	-29.047	1.00	14.21	A
	ATOM	7025	N	LEU	A	896	32.565	62.525	-31.056	1.00	14.43	A
	ATOM	7026	CA	LEU	A	896	31.397	61.912	-31.690	1.00	15.16	A
40	ATOM	7027	CB	LEU	A	896	30.692	62.896	-32.632	1.00	16.09	A
	ATOM	7028	CG	LEU	A	896	29.533	62.295	-33.441	1.00	16.60	A
	ATOM	7029	CD1	LEU	A	896	28.388	61.921	-32.507	1.00	16.94	A
	ATOM	7030	CD2	LEU	A	896	29.055	63.298	-34.489	1.00	17.67	A
	ATOM	7031	C	LEU	A	896	31.967	60.746	-32.498	1.00	15.44	A
45	ATOM	7032	O	LEU	A	896	32.934	60.924	-33.240	1.00	15.11	A
	ATOM	7033	N	GLU	A	897	31.382	59.560	-32.348	1.00	15.78	A
	ATOM	7034	CA	GLU	A	897	31.882	58.379	-33.052	1.00	16.64	A
	ATOM	7035	CB	GLU	A	897	32.838	57.591	-32.157	1.00	17.33	A
	ATOM	7036	CG	GLU	A	897	34.005	58.347	-31.591	1.00	18.67	A
50	ATOM	7037	CD	GLU	A	897	34.770	57.506	-30.583	1.00	18.78	A
	ATOM	7038	OE1	GLU	A	897	34.189	57.165	-29.530	1.00	20.08	A
	ATOM	7039	OE2	GLU	A	897	35.941	57.180	-30.850	1.00	20.18	A
	ATOM	7040	C	GLU	A	897	30.789	57.406	-33.455	1.00	16.86	A
	ATOM	7041	O	GLU	A	897	29.731	57.356	-32.834	1.00	16.37	A
55	ATOM	7042	N	LYS	A	898	31.070	56.620	-34.491	1.00	17.54	A
	ATOM	7043	CA	LYS	A	898	30.149	55.583	-34.935	1.00	18.69	A
	ATOM	7044	CB	LYS	A	898	30.296	55.327	-36.438	1.00	19.99	A
	ATOM	7045	CG	LYS	A	898	29.903	56.506	-37.323	1.00	21.82	A
	ATOM	7046	CD	LYS	A	898	28.480	56.982	-37.034	1.00	24.25	A

5	ATOM	7047	CE	LYS	A	898	27.461	55.858	-37.177	1.00	25.50	A
	ATOM	7048	NZ	LYS	A	898	26.080	56.336	-36.892	1.00	27.51	A
	ATOM	7049	C	LYS	A	898	30.619	54.359	-34.145	1.00	18.71	A
	ATOM	7050	O	LYS	A	898	31.815	54.072	-34.095	1.00	19.42	A
	ATOM	7051	N	VAL	A	899	29.691	53.647	-33.517	1.00	18.14	A
10	ATOM	7052	CA	VAL	A	899	30.062	52.486	-32.720	1.00	17.77	A
	ATOM	7053	CB	VAL	A	899	29.804	52.759	-31.219	1.00	17.74	A
	ATOM	7054	CG1	VAL	A	899	30.749	53.847	-30.719	1.00	17.93	A
	ATOM	7055	CG2	VAL	A	899	28.354	53.189	-31.009	1.00	17.25	A
	ATOM	7056	C	VAL	A	899	29.329	51.204	-33.117	1.00	17.99	A
15	ATOM	7057	O	VAL	A	899	29.343	50.225	-32.375	1.00	16.80	A
	ATOM	7058	N	ASN	A	900	28.696	51.204	-34.286	1.00	18.17	A
	ATOM	7059	CA	ASN	A	900	27.960	50.022	-34.727	1.00	19.54	A
	ATOM	7060	CB	ASN	A	900	27.149	50.336	-35.993	1.00	21.01	A
	ATOM	7061	CG	ASN	A	900	27.997	50.923	-37.096	1.00	22.59	A
20	ATOM	7062	OD1	ASN	A	900	28.594	51.989	-36.935	1.00	24.04	A
	ATOM	7063	ND2	ASN	A	900	28.058	50.231	-38.230	1.00	23.54	A
	ATOM	7064	C	ASN	A	900	28.858	48.813	-34.979	1.00	19.41	A
	ATOM	7065	O	ASN	A	900	28.390	47.676	-34.950	1.00	19.92	A
	ATOM	7066	N	ASN	A	901	30.142	49.048	-35.226	1.00	18.98	A
25	ATOM	7067	CA	ASN	A	901	31.067	47.946	-35.478	1.00	19.29	A
	ATOM	7068	CB	ASN	A	901	32.053	48.310	-36.589	1.00	20.87	A
	ATOM	7069	CG	ASN	A	901	31.401	48.359	-37.948	1.00	23.08	A
	ATOM	7070	OD1	ASN	A	901	30.649	47.459	-38.315	1.00	24.77	A
	ATOM	7071	ND2	ASN	A	901	31.695	49.407	-38.712	1.00	24.33	A
30	ATOM	7072	C	ASN	A	901	31.855	47.535	-34.243	1.00	18.73	A
	ATOM	7073	O	ASN	A	901	32.631	46.583	-34.288	1.00	18.51	A
	ATOM	7074	N	CYS	A	902	31.660	48.251	-33.142	1.00	17.77	A
	ATOM	7075	CA	CYS	A	902	32.382	47.944	-31.913	1.00	17.80	A
	ATOM	7076	C	CYS	A	902	31.806	46.754	-31.162	1.00	17.57	A
35	ATOM	7077	O	CYS	A	902	30.591	46.581	-31.087	1.00	18.35	A
	ATOM	7078	CB	CYS	A	902	32.370	49.140	-30.963	1.00	18.11	A
	ATOM	7079	SG	CYS	A	902	33.114	50.689	-31.563	1.00	18.40	A
	ATOM	7080	N	VAL	A	903	32.688	45.941	-30.596	1.00	17.18	A
	ATOM	7081	CA	VAL	A	903	32.258	44.795	-29.809	1.00	16.95	A
40	ATOM	7082	CB	VAL	A	903	33.354	43.719	-29.739	1.00	16.42	A
	ATOM	7083	CG1	VAL	A	903	32.911	42.586	-28.820	1.00	16.29	A
	ATOM	7084	CG2	VAL	A	903	33.643	43.188	-31.134	1.00	16.61	A
	ATOM	7085	C	VAL	A	903	31.993	45.345	-28.411	1.00	17.40	A
	ATOM	7086	O	VAL	A	903	32.924	45.634	-27.659	1.00	17.19	A
45	ATOM	7087	N	ARG	A	904	30.721	45.508	-28.076	1.00	17.57	A
	ATOM	7088	CA	ARG	A	904	30.339	46.054	-26.781	1.00	19.09	A
	ATOM	7089	CB	ARG	A	904	29.312	47.174	-26.985	1.00	19.60	A
	ATOM	7090	CG	ARG	A	904	29.902	48.417	-27.636	1.00	20.55	A
	ATOM	7091	CD	ARG	A	904	28.834	49.450	-27.962	1.00	22.04	A
50	ATOM	7092	NE	ARG	A	904	28.034	49.070	-29.123	1.00	22.98	A
	ATOM	7093	CZ	ARG	A	904	27.079	49.835	-29.649	1.00	24.10	A
	ATOM	7094	NH1	ARG	A	904	26.807	51.018	-29.114	1.00	23.36	A
	ATOM	7095	NH2	ARG	A	904	26.402	49.421	-30.713	1.00	23.49	A
	ATOM	7096	C	ARG	A	904	29.778	45.010	-25.826	1.00	18.91	A
55	ATOM	7097	O	ARG	A	904	29.445	43.895	-26.233	1.00	19.16	A
	ATOM	7098	N	PRO	A	905	29.684	45.355	-24.531	1.00	18.86	A
	ATOM	7099	CD	PRO	A	905	30.225	46.564	-23.885	1.00	18.98	A
	ATOM	7100	CA	PRO	A	905	29.152	44.427	-23.530	1.00	18.75	A
	ATOM	7101	CB	PRO	A	905	29.356	45.177	-22.217	1.00	18.15	A

5	ATOM	7102	CG	PRO	A	905	30.531	46.064	-22.503	1.00	18.29	A
	ATOM	7103	C	PRO	A	905	27.677	44.182	-23.811	1.00	19.11	A
	ATOM	7104	O	PRO	A	905	27.020	45.011	-24.447	1.00	18.48	A
	ATOM	7105	N	SER	A	906	27.156	43.052	-23.339	1.00	19.65	A
	ATOM	7106	CA	SER	A	906	25.747	42.741	-23.548	1.00	20.62	A
10	ATOM	7107	CB	SER	A	906	25.405	41.351	-23.011	1.00	21.91	A
	ATOM	7108	OG	SER	A	906	25.224	41.388	-21.605	1.00	23.95	A
	ATOM	7109	C	SER	A	906	24.911	43.774	-22.809	1.00	20.80	A
	ATOM	7110	O	SER	A	906	25.427	44.536	-21.988	1.00	19.32	A
	ATOM	7111	N	LYS	A	907	23.615	43.782	-23.095	1.00	21.12	A
15	ATOM	7112	CA	LYS	A	907	22.692	44.721	-22.474	1.00	22.75	A
	ATOM	7113	CB	LYS	A	907	21.291	44.523	-23.063	1.00	25.21	A
	ATOM	7114	CG	LYS	A	907	21.187	44.877	-24.541	1.00	28.17	A
	ATOM	7115	CD	LYS	A	907	19.869	44.394	-25.156	1.00	30.78	A
	ATOM	7116	CE	LYS	A	907	18.652	44.921	-24.398	1.00	32.30	A
20	ATOM	7117	NZ	LYS	A	907	18.558	46.411	-24.413	1.00	34.30	A
	ATOM	7118	C	LYS	A	907	22.631	44.606	-20.952	1.00	21.68	A
	ATOM	7119	O	LYS	A	907	22.243	45.552	-20.272	1.00	22.39	A
	ATOM	7120	N	LEU	A	908	23.023	43.454	-20.417	1.00	20.87	A
	ATOM	7121	CA	LEU	A	908	22.972	43.237	-18.974	1.00	20.13	A
25	ATOM	7122	CB	LEU	A	908	22.543	41.793	-18.686	1.00	21.33	A
	ATOM	7123	CG	LEU	A	908	21.169	41.386	-19.238	1.00	22.83	A
	ATOM	7124	CD1	LEU	A	908	20.891	39.928	-18.905	1.00	22.96	A
	ATOM	7125	CD2	LEU	A	908	20.081	42.285	-18.650	1.00	23.40	A
	ATOM	7126	C	LEU	A	908	24.271	43.549	-18.226	1.00	18.65	A
30	ATOM	7127	O	LEU	A	908	24.307	43.506	-16.996	1.00	18.58	A
	ATOM	7128	N	HIS	A	909	25.330	43.864	-18.962	1.00	17.27	A
	ATOM	7129	CA	HIS	A	909	26.618	44.178	-18.345	1.00	16.78	A
	ATOM	7130	CB	HIS	A	909	27.719	44.152	-19.409	1.00	16.00	A
	ATOM	7131	CG	HIS	A	909	29.093	43.939	-18.857	1.00	16.16	A
35	ATOM	7132	CD2	HIS	A	909	29.923	42.871	-18.927	1.00	15.42	A
	ATOM	7133	ND1	HIS	A	909	29.764	44.899	-18.129	1.00	15.64	A
	ATOM	7134	CE1	HIS	A	909	30.948	44.432	-17.776	1.00	16.06	A
	ATOM	7135	NE2	HIS	A	909	31.070	43.203	-18.249	1.00	16.03	A
	ATOM	7136	C	HIS	A	909	26.535	45.561	-17.688	1.00	15.94	A
40	ATOM	7137	O	HIS	A	909	26.027	46.509	-18.286	1.00	15.96	A
	ATOM	7138	N	PRO	A	910	27.028	45.689	-16.445	1.00	15.17	A
	ATOM	7139	CD	PRO	A	910	27.462	44.595	-15.561	1.00	15.87	A
	ATOM	7140	CA	PRO	A	910	27.004	46.958	-15.706	1.00	14.56	A
	ATOM	7141	CB	PRO	A	910	27.193	46.525	-14.246	1.00	14.78	A
45	ATOM	7142	CG	PRO	A	910	26.902	45.041	-14.247	1.00	15.77	A
	ATOM	7143	C	PRO	A	910	28.076	47.971	-16.108	1.00	13.94	A
	ATOM	7144	O	PRO	A	910	28.051	49.112	-15.642	1.00	14.38	A
	ATOM	7145	N	ALA	A	911	29.016	47.561	-16.952	1.00	13.17	A
	ATOM	7146	CA	ALA	A	911	30.095	48.455	-17.354	1.00	13.46	A
50	ATOM	7147	CB	ALA	A	911	31.445	47.784	-17.086	1.00	13.95	A
	ATOM	7148	C	ALA	A	911	30.049	48.933	-18.797	1.00	12.94	A
	ATOM	7149	O	ALA	A	911	29.284	48.431	-19.621	1.00	12.72	A
	ATOM	7150	N	GLY	A	912	30.898	49.914	-19.081	1.00	13.06	A
	ATOM	7151	CA	GLY	A	912	31.019	50.468	-20.415	1.00	13.02	A
55	ATOM	7152	C	GLY	A	912	32.493	50.752	-20.614	1.00	13.32	A
	ATOM	7153	O	GLY	A	912	33.223	50.894	-19.630	1.00	13.24	A
	ATOM	7154	N	TYR	A	913	32.941	50.830	-21.865	1.00	12.99	A
	ATOM	7155	CA	TYR	A	913	34.348	51.097	-22.148	1.00	13.02	A
	ATOM	7156	CB	TYR	A	913	35.067	49.804	-22.546	1.00	13.52	A

	ATOM	7157	CG	TYR	A	913	35.020	48.754	-21.462	1.00	13.68	A
	ATOM	7158	CD1	TYR	A	913	34.023	47.782	-21.451	1.00	14.79	A
	ATOM	7159	CE1	TYR	A	913	33.927	46.864	-20.409	1.00	14.26	A
5	ATOM	7160	CD2	TYR	A	913	35.929	48.780	-20.406	1.00	13.81	A
	ATOM	7161	CE2	TYR	A	913	35.842	47.868	-19.358	1.00	14.11	A
	ATOM	7162	CZ	TYR	A	913	34.835	46.916	-19.367	1.00	14.91	A
	ATOM	7163	OH	TYR	A	913	34.717	46.030	-18.322	1.00	15.05	A
	ATOM	7164	C	TYR	A	913	34.536	52.135	-23.243	1.00	12.69	A
10	ATOM	7165	O	TYR	A	913	33.729	52.235	-24.164	1.00	12.95	A
	ATOM	7166	N	LEU	A	914	35.614	52.904	-23.130	1.00	12.39	A
	ATOM	7167	CA	LEU	A	914	35.934	53.934	-24.110	1.00	11.88	A
	ATOM	7168	CB	LEU	A	914	36.920	54.953	-23.523	1.00	10.80	A
	ATOM	7169	CG	LEU	A	914	36.488	55.845	-22.354	1.00	11.21	A
15	ATOM	7170	CD1	LEU	A	914	37.606	56.837	-22.050	1.00	10.84	A
	ATOM	7171	CD2	LEU	A	914	35.199	56.589	-22.701	1.00	11.02	A
	ATOM	7172	C	LEU	A	914	36.563	53.342	-25.361	1.00	12.53	A
	ATOM	7173	O	LEU	A	914	37.001	52.185	-25.380	1.00	11.85	A
	ATOM	7174	N	THR	A	915	36.594	54.162	-26.406	1.00	12.37	A
20	ATOM	7175	CA	THR	A	915	37.207	53.810	-27.674	1.00	12.90	A
	ATOM	7176	CB	THR	A	915	36.520	54.514	-28.850	1.00	13.18	A
	ATOM	7177	OG1	THR	A	915	36.487	55.923	-28.588	1.00	14.07	A
	ATOM	7178	CG2	THR	A	915	35.107	53.998	-29.050	1.00	13.81	A
	ATOM	7179	C	THR	A	915	38.609	54.390	-27.571	1.00	13.07	A
25	ATOM	7180	O	THR	A	915	38.890	55.184	-26.674	1.00	12.57	A
	ATOM	7181	N	SER	A	916	39.479	54.004	-28.494	1.00	13.02	A
	ATOM	7182	CA	SER	A	916	40.846	54.504	-28.517	1.00	13.32	A
	ATOM	7183	CB	SER	A	916	41.584	53.933	-29.727	1.00	14.65	A
	ATOM	7184	OG	SER	A	916	42.822	54.591	-29.917	1.00	18.31	A
30	ATOM	7185	C	SER	A	916	40.883	56.031	-28.580	1.00	13.17	A
	ATOM	7186	O	SER	A	916	41.628	56.672	-27.842	1.00	11.89	A
	ATOM	7187	N	ALA	A	917	40.074	56.611	-29.463	1.00	12.45	A
	ATOM	7188	CA	ALA	A	917	40.043	58.065	-29.620	1.00	12.29	A
	ATOM	7189	CB	ALA	A	917	39.113	58.451	-30.764	1.00	13.11	A
35	ATOM	7190	C	ALA	A	917	39.609	58.771	-28.343	1.00	12.12	A
	ATOM	7191	O	ALA	A	917	40.201	59.779	-27.951	1.00	11.03	A
	ATOM	7192	N	ALA	A	918	38.569	58.248	-27.702	1.00	11.73	A
	ATOM	7193	CA	ALA	A	918	38.060	58.851	-26.474	1.00	11.66	A
	ATOM	7194	CB	ALA	A	918	36.761	58.174	-26.062	1.00	11.10	A
40	ATOM	7195	C	ALA	A	918	39.089	58.747	-25.353	1.00	11.78	A
	ATOM	7196	O	ALA	A	918	39.261	59.675	-24.555	1.00	11.86	A
	ATOM	7197	N	HIS	A	919	39.773	57.612	-25.289	1.00	10.86	A
	ATOM	7198	CA	HIS	A	919	40.785	57.409	-24.262	1.00	11.84	A
	ATOM	7199	CB	HIS	A	919	41.281	55.959	-24.287	1.00	11.67	A
45	ATOM	7200	CG	HIS	A	919	42.386	55.683	-23.315	1.00	13.50	A
	ATOM	7201	CD2	HIS	A	919	42.420	55.735	-21.963	1.00	13.61	A
	ATOM	7202	ND1	HIS	A	919	43.658	55.331	-23.716	1.00	13.89	A
	ATOM	7203	CE1	HIS	A	919	44.427	55.180	-22.654	1.00	13.39	A
	ATOM	7204	NE2	HIS	A	919	43.701	55.420	-21.577	1.00	14.91	A
50	ATOM	7205	C	HIS	A	919	41.952	58.376	-24.473	1.00	11.88	A
	ATOM	7206	O	HIS	A	919	42.399	59.037	-23.532	1.00	11.54	A
	ATOM	7207	N	LYS	A	920	42.440	58.473	-25.706	1.00	11.97	A
	ATOM	7208	CA	LYS	A	920	43.547	59.378	-25.979	1.00	12.11	A
	ATOM	7209	CB	LYS	A	920	44.042	59.215	-27.421	1.00	13.63	A
	ATOM	7210	CG	LYS	A	920	44.909	57.967	-27.617	1.00	14.69	A
55	ATOM	7211	CD	LYS	A	920	45.591	57.946	-28.978	1.00	15.57	A

5	ATOM	7212	CE	LYS	A	920	46.543	56.769	-29.089	1.00	15.56	A
	ATOM	7213	NZ	LYS	A	920	47.665	56.868	-28.111	1.00	16.03	A
	ATOM	7214	C	LYS	A	920	43.145	60.823	-25.712	1.00	11.83	A
	ATOM	7215	O	LYS	A	920	43.962	61.623	-25.251	1.00	11.38	A
	ATOM	7216	N	ALA	A	921	41.886	61.154	-25.989	1.00	11.22	A
10	ATOM	7217	CA	ALA	A	921	41.399	62.513	-25.757	1.00	11.42	A
	ATOM	7218	CB	ALA	A	921	39.972	62.664	-26.297	1.00	10.82	A
	ATOM	7219	C	ALA	A	921	41.443	62.810	-24.256	1.00	11.71	A
	ATOM	7220	O	ALA	A	921	41.803	63.914	-23.841	1.00	12.03	A
	ATOM	7221	N	SER	A	922	41.085	61.824	-23.439	1.00	10.96	A
15	ATOM	7222	CA	SER	A	922	41.120	62.015	-21.992	1.00	10.63	A
	ATOM	7223	CB	SER	A	922	40.574	60.783	-21.263	1.00	10.56	A
	ATOM	7224	OG	SER	A	922	40.661	60.964	-19.855	1.00	9.29	A
	ATOM	7225	C	SER	A	922	42.560	62.257	-21.547	1.00	10.95	A
	ATOM	7226	O	SER	A	922	42.824	63.116	-20.709	1.00	11.72	A
20	ATOM	7227	N	GLN	A	923	43.493	61.498	-22.113	1.00	11.31	A
	ATOM	7228	CA	GLN	A	923	44.897	61.650	-21.755	1.00	11.08	A
	ATOM	7229	CB	GLN	A	923	45.740	60.551	-22.404	1.00	11.10	A
	ATOM	7230	CG	GLN	A	923	45.413	59.139	-21.923	1.00	10.78	A
	ATOM	7231	CD	GLN	A	923	46.344	58.104	-22.518	1.00	11.62	A
25	ATOM	7232	OE1	GLN	A	923	46.500	58.031	-23.738	1.00	12.23	A
	ATOM	7233	NE2	GLN	A	923	46.973	57.294	-21.659	1.00	11.02	A
	ATOM	7234	C	GLN	A	923	45.433	63.023	-22.157	1.00	11.58	A
	ATOM	7235	O	GLN	A	923	46.312	63.566	-21.486	1.00	11.23	A
	ATOM	7236	N	SER	A	924	44.902	63.585	-23.241	1.00	11.01	A
30	ATOM	7237	CA	SER	A	924	45.343	64.900	-23.704	1.00	12.31	A
	ATOM	7238	CB	SER	A	924	44.727	65.236	-25.069	1.00	13.21	A
	ATOM	7239	OG	SER	A	924	43.363	65.616	-24.936	1.00	13.77	A
	ATOM	7240	C	SER	A	924	44.948	65.981	-22.702	1.00	12.26	A
	ATOM	7241	O	SER	A	924	45.590	67.030	-22.625	1.00	13.44	A
35	ATOM	7242	N	LEU	A	925	43.886	65.728	-21.944	1.00	11.76	A
	ATOM	7243	CA	LEU	A	925	43.408	66.684	-20.950	1.00	11.62	A
	ATOM	7244	CB	LEU	A	925	41.892	66.533	-20.759	1.00	12.13	A
	ATOM	7245	CG	LEU	A	925	41.000	66.792	-21.977	1.00	11.95	A
	ATOM	7246	CD1	LEU	A	925	39.552	66.421	-21.645	1.00	11.65	A
40	ATOM	7247	CD2	LEU	A	925	41.101	68.252	-22.387	1.00	12.24	A
	ATOM	7248	C	LEU	A	925	44.092	66.524	-19.593	1.00	11.32	A
	ATOM	7249	O	LEU	A	925	44.483	67.507	-18.962	1.00	11.10	A
	ATOM	7250	N	LEU	A	926	44.240	65.282	-19.148	1.00	10.58	A
	ATOM	7251	CA	LEU	A	926	44.837	65.021	-17.843	1.00	10.87	A
45	ATOM	7252	CB	LEU	A	926	44.268	63.725	-17.257	1.00	10.32	A
	ATOM	7253	CG	LEU	A	926	42.756	63.720	-17.008	1.00	11.66	A
	ATOM	7254	CD1	LEU	A	926	42.337	62.385	-16.410	1.00	11.49	A
	ATOM	7255	CD2	LEU	A	926	42.385	64.867	-16.070	1.00	12.14	A
	ATOM	7256	C	LEU	A	926	46.356	64.961	-17.808	1.00	11.34	A
50	ATOM	7257	O	LEU	A	926	46.962	65.305	-16.795	1.00	11.49	A
	ATOM	7258	N	ASP	A	927	46.975	64.519	-18.897	1.00	10.72	A
	ATOM	7259	CA	ASP	A	927	48.430	64.415	-18.928	1.00	11.43	A
	ATOM	7260	CB	ASP	A	927	48.847	62.968	-18.666	1.00	10.70	A
	ATOM	7261	CG	ASP	A	927	48.500	62.520	-17.260	1.00	11.69	A
55	ATOM	7262	OD1	ASP	A	927	49.209	62.924	-16.315	1.00	10.68	A
	ATOM	7263	OD2	ASP	A	927	47.509	61.782	-17.098	1.00	11.79	A
	ATOM	7264	C	ASP	A	927	49.022	64.910	-20.238	1.00	10.90	A
	ATOM	7265	O	ASP	A	927	49.586	64.141	-21.015	1.00	10.70	A
	ATOM	7266	N	PRO	A	928	48.900	66.220	-20.493	1.00	11.75	A

5	ATOM	7267	CD	PRO	A	928	48.353	67.244	-19.583	1.00	11.72	A
	ATOM	7268	CA	PRO	A	928	49.418	66.837	-21.714	1.00	11.93	A
	ATOM	7269	CB	PRO	A	928	48.776	68.218	-21.688	1.00	12.47	A
	ATOM	7270	CG	PRO	A	928	48.823	68.550	-20.232	1.00	12.77	A
	ATOM	7271	C	PRO	A	928	50.932	66.928	-21.666	1.00	11.95	A
10	ATOM	7272	O	PRO	A	928	51.550	66.661	-20.632	1.00	12.15	A
	ATOM	7273	N	LEU	A	929	51.531	67.305	-22.790	1.00	11.74	A
	ATOM	7274	CA	LEU	A	929	52.972	67.475	-22.829	1.00	11.78	A
	ATOM	7275	CB	LEU	A	929	53.441	67.845	-24.238	1.00	11.20	A
	ATOM	7276	CG	LEU	A	929	53.239	66.863	-25.387	1.00	10.78	A
15	ATOM	7277	CD1	LEU	A	929	53.803	67.478	-26.667	1.00	10.05	A
	ATOM	7278	CD2	LEU	A	929	53.945	65.545	-25.076	1.00	10.07	A
	ATOM	7279	C	LEU	A	929	53.282	68.645	-21.904	1.00	11.69	A
	ATOM	7280	O	LEU	A	929	52.479	69.568	-21.778	1.00	12.26	A
	ATOM	7281	N	ASP	A	930	54.433	68.598	-21.245	1.00	11.94	A
20	ATOM	7282	CA	ASP	A	930	54.852	69.694	-20.381	1.00	12.26	A
	ATOM	7283	CB	ASP	A	930	55.596	69.151	-19.167	1.00	11.95	A
	ATOM	7284	CG	ASP	A	930	54.766	68.167	-18.392	1.00	12.69	A
	ATOM	7285	OD1	ASP	A	930	53.734	68.594	-17.835	1.00	12.39	A
	ATOM	7286	OD2	ASP	A	930	55.134	66.973	-18.357	1.00	11.41	A
25	ATOM	7287	C	ASP	A	930	55.778	70.558	-21.227	1.00	12.84	A
	ATOM	7288	O	ASP	A	930	56.532	70.039	-22.052	1.00	13.10	A
	ATOM	7289	N	LYS	A	931	55.723	71.870	-21.025	1.00	12.78	A
	ATOM	7290	CA	LYS	A	931	56.542	72.789	-21.807	1.00	13.16	A
	ATOM	7291	CB	LYS	A	931	55.630	73.733	-22.600	1.00	13.75	A
30	ATOM	7292	CG	LYS	A	931	54.632	73.015	-23.505	1.00	13.74	A
	ATOM	7293	CD	LYS	A	931	53.724	74.003	-24.235	1.00	15.47	A
	ATOM	7294	CE	LYS	A	931	52.865	74.794	-23.260	1.00	16.58	A
	ATOM	7295	NZ	LYS	A	931	51.992	75.781	-23.944	1.00	16.56	A
	ATOM	7296	C	LYS	A	931	57.512	73.605	-20.964	1.00	13.32	A
35	ATOM	7297	O	LYS	A	931	57.118	74.237	-19.985	1.00	13.84	A
	ATOM	7298	N	PHE	A	932	58.780	73.606	-21.371	1.00	13.15	A
	ATOM	7299	CA	PHE	A	932	59.822	74.337	-20.659	1.00	12.96	A
	ATOM	7300	CB	PHE	A	932	60.893	73.374	-20.136	1.00	12.56	A
	ATOM	7301	CG	PHE	A	932	60.359	72.279	-19.260	1.00	13.12	A
40	ATOM	7302	CD1	PHE	A	932	59.737	71.165	-19.814	1.00	13.77	A
	ATOM	7303	CD2	PHE	A	932	60.501	72.351	-17.877	1.00	14.17	A
	ATOM	7304	CE1	PHE	A	932	59.266	70.129	-19.002	1.00	14.15	A
	ATOM	7305	CE2	PHE	A	932	60.035	71.327	-17.056	1.00	14.64	A
	ATOM	7306	CZ	PHE	A	932	59.416	70.213	-17.619	1.00	14.94	A
45	ATOM	7307	C	PHE	A	932	60.509	75.378	-21.544	1.00	12.75	A
	ATOM	7308	O	PHE	A	932	60.875	75.090	-22.678	1.00	12.07	A
	ATOM	7309	N	ILE	A	933	60.674	76.589	-21.018	1.00	12.97	A
	ATOM	7310	CA	ILE	A	933	61.343	77.668	-21.750	1.00	12.57	A
	ATOM	7311	CB	ILE	A	933	60.542	78.986	-21.685	1.00	12.77	A
50	ATOM	7312	CG2	ILE	A	933	61.264	80.066	-22.486	1.00	11.64	A
	ATOM	7313	CG1	ILE	A	933	59.118	78.771	-22.204	1.00	12.09	A
	ATOM	7314	CD1	ILE	A	933	58.212	79.983	-22.024	1.00	12.14	A
	ATOM	7315	C	ILE	A	933	62.696	77.921	-21.084	1.00	13.11	A
	ATOM	7316	O	ILE	A	933	62.749	78.206	-19.888	1.00	13.09	A
55	ATOM	7317	N	PHE	A	934	63.786	77.816	-21.842	1.00	13.10	A
	ATOM	7318	CA	PHE	A	934	65.107	78.047	-21.265	1.00	14.56	A
	ATOM	7319	CB	PHE	A	934	66.205	77.743	-22.286	1.00	14.68	A
	ATOM	7320	CG	PHE	A	934	67.580	77.722	-21.690	1.00	15.61	A
	ATOM	7321	CD1	PHE	A	934	67.960	76.697	-20.828	1.00	15.02	A

5	ATOM	7322	CD2	PHE	A	934	68.481	78.750	-21.952	1.00	15.60	A
	ATOM	7323	CE1	PHE	A	934	69.220	76.695	-20.227	1.00	16.49	A
	ATOM	7324	CE2	PHE	A	934	69.742	78.761	-21.360	1.00	16.52	A
	ATOM	7325	CZ	PHE	A	934	70.113	77.730	-20.494	1.00	16.83	A
	ATOM	7326	C	PHE	A	934	65.202	79.506	-20.808	1.00	15.07	A
10	ATOM	7327	O	PHE	A	934	64.926	80.422	-21.581	1.00	14.45	A
	ATOM	7328	N	ALA	A	935	65.597	79.714	-19.554	1.00	16.05	A
	ATOM	7329	CA	ALA	A	935	65.682	81.057	-18.978	1.00	17.74	A
	ATOM	7330	CB	ALA	A	935	65.734	80.957	-17.458	1.00	18.05	A
	ATOM	7331	C	ALA	A	935	66.825	81.946	-19.468	1.00	19.42	A
15	ATOM	7332	O	ALA	A	935	66.605	83.113	-19.805	1.00	20.11	A
	ATOM	7333	N	GLU	A	936	68.038	81.404	-19.500	1.00	19.30	A
	ATOM	7334	CA	GLU	A	936	69.213	82.163	-19.927	1.00	20.81	A
	ATOM	7335	CB	GLU	A	936	70.488	81.439	-19.485	1.00	21.98	A
	ATOM	7336	CG	GLU	A	936	70.651	81.309	-17.975	1.00	24.47	A
20	ATOM	7337	CD	GLU	A	936	71.765	80.343	-17.592	1.00	26.26	A
	ATOM	7338	OE1	GLU	A	936	71.580	79.117	-17.761	1.00	26.72	A
	ATOM	7339	OE2	GLU	A	936	72.829	80.807	-17.131	1.00	27.77	A
	ATOM	7340	C	GLU	A	936	69.252	82.390	-21.437	1.00	20.69	A
	ATOM	7341	O	GLU	A	936	68.439	81.841	-22.180	1.00	20.44	A
25	ATOM	7342	N	ASN	A	937	70.204	83.199	-21.889	1.00	20.78	A
	ATOM	7343	CA	ASN	A	937	70.318	83.485	-23.311	1.00	21.36	A
	ATOM	7344	CB	ASN	A	937	71.173	84.735	-23.544	1.00	22.75	A
	ATOM	7345	CG	ASN	A	937	70.505	85.996	-23.033	1.00	24.01	A
	ATOM	7346	OD1	ASN	A	937	69.288	86.162	-23.152	1.00	23.86	A
30	ATOM	7347	ND2	ASN	A	937	71.298	86.900	-22.477	1.00	25.45	A
	ATOM	7348	C	ASN	A	937	70.888	82.316	-24.101	1.00	21.20	A
	ATOM	7349	O	ASN	A	937	70.477	82.080	-25.236	1.00	21.22	A
	ATOM	7350	N	GLU	A	938	71.827	81.585	-23.507	1.00	21.16	A
	ATOM	7351	CA	GLU	A	938	72.426	80.442	-24.189	1.00	22.06	A
35	ATOM	7352	CB	GLU	A	938	73.828	80.795	-24.700	1.00	23.73	A
	ATOM	7353	CG	GLU	A	938	74.576	79.599	-25.276	1.00	26.61	A
	ATOM	7354	CD	GLU	A	938	75.794	79.992	-26.085	1.00	29.03	A
	ATOM	7355	OE1	GLU	A	938	76.633	80.761	-25.569	1.00	30.78	A
	ATOM	7356	OE2	GLU	A	938	75.913	79.522	-27.238	1.00	30.10	A
40	ATOM	7357	C	GLU	A	938	72.501	79.184	-23.327	1.00	21.20	A
	ATOM	7358	O	GLU	A	938	72.890	79.233	-22.159	1.00	21.04	A
	ATOM	7359	N	TRP	A	939	72.122	78.058	-23.923	1.00	21.05	A
	ATOM	7360	CA	TRP	A	939	72.140	76.770	-23.240	1.00	20.83	A
	ATOM	7361	CB	TRP	A	939	70.826	76.026	-23.509	1.00	19.37	A
45	ATOM	7362	CG	TRP	A	939	70.706	74.673	-22.853	1.00	17.33	A
	ATOM	7363	CD2	TRP	A	939	69.626	73.743	-23.011	1.00	16.09	A
	ATOM	7364	CE2	TRP	A	939	69.929	72.610	-22.225	1.00	16.09	A
	ATOM	7365	CE3	TRP	A	939	68.432	73.759	-23.743	1.00	15.61	A
	ATOM	7366	CD1	TRP	A	939	71.596	74.082	-22.000	1.00	17.03	A
50	ATOM	7367	NE1	TRP	A	939	71.137	72.841	-21.618	1.00	16.57	A
	ATOM	7368	CZ2	TRP	A	939	69.079	71.501	-22.150	1.00	15.03	A
	ATOM	7369	CZ3	TRP	A	939	67.585	72.655	-23.669	1.00	15.11	A
	ATOM	7370	CH2	TRP	A	939	67.915	71.543	-22.876	1.00	14.62	A
	ATOM	7371	C	TRP	A	939	73.329	75.971	-23.764	1.00	21.47	A
55	ATOM	7372	O	TRP	A	939	73.244	75.312	-24.799	1.00	21.83	A
	ATOM	7373	N	ILE	A	940	74.442	76.044	-23.047	1.00	22.34	A
	ATOM	7374	CA	ILE	A	940	75.652	75.337	-23.449	1.00	23.09	A
	ATOM	7375	CB	ILE	A	940	76.883	75.915	-22.715	1.00	23.89	A
	ATOM	7376	CG2	ILE	A	940	78.139	75.154	-23.108	1.00	24.48	A

5	ATOM	7377	CG1	ILE	A	940	77.034	77.399	-23.064	1.00	24.81	A
	ATOM	7378	CD1	ILE	A	940	78.176	78.092	-22.348	1.00	25.61	A
	ATOM	7379	C	ILE	A	940	75.548	73.836	-23.178	1.00	22.56	A
	ATOM	7380	O	ILE	A	940	75.178	73.418	-22.083	1.00	23.32	A
	ATOM	7381	N	GLY	A	941	75.865	73.032	-24.188	1.00	22.27	A
10	ATOM	7382	CA	GLY	A	941	75.806	71.589	-24.034	1.00	21.71	A
	ATOM	7383	C	GLY	A	941	74.420	71.002	-24.242	1.00	21.38	A
	ATOM	7384	O	GLY	A	941	74.192	69.822	-23.964	1.00	20.47	A
	ATOM	7385	N	ALA	A	942	73.497	71.819	-24.744	1.00	20.82	A
	ATOM	7386	CA	ALA	A	942	72.127	71.379	-24.990	1.00	20.86	A
15	ATOM	7387	CB	ALA	A	942	71.307	72.534	-25.561	1.00	20.40	A
	ATOM	7388	C	ALA	A	942	72.023	70.170	-25.920	1.00	20.97	A
	ATOM	7389	O	ALA	A	942	72.756	70.062	-26.904	1.00	20.70	A
	ATOM	7390	N	GLN	A	943	71.101	69.265	-25.600	1.00	20.56	A
	ATOM	7391	CA	GLN	A	943	70.868	68.071	-26.409	1.00	20.90	A
20	ATOM	7392	CB	GLN	A	943	71.085	66.807	-25.575	1.00	21.74	A
	ATOM	7393	CG	GLN	A	943	72.449	66.764	-24.900	1.00	24.32	A
	ATOM	7394	CD	GLN	A	943	72.713	65.453	-24.187	1.00	26.18	A
	ATOM	7395	OE1	GLN	A	943	71.852	64.939	-23.469	1.00	27.65	A
	ATOM	7396	NE2	GLN	A	943	73.912	64.908	-24.373	1.00	26.08	A
25	ATOM	7397	C	GLN	A	943	69.437	68.133	-26.936	1.00	20.33	A
	ATOM	7398	O	GLN	A	943	68.570	68.759	-26.325	1.00	19.79	A
	ATOM	7399	N	GLY	A	944	69.184	67.475	-28.061	1.00	19.43	A
	ATOM	7400	CA	GLY	A	944	67.862	67.544	-28.656	1.00	19.33	A
	ATOM	7401	C	GLY	A	944	66.799	66.552	-28.246	1.00	19.13	A
30	ATOM	7402	O	GLY	A	944	65.624	66.761	-28.546	1.00	18.88	A
	ATOM	7403	N	GLN	A	945	67.179	65.484	-27.557	1.00	18.55	A
	ATOM	7404	CA	GLN	A	945	66.181	64.493	-27.185	1.00	18.84	A
	ATOM	7405	CB	GLN	A	945	65.800	63.702	-28.438	1.00	20.33	A
	ATOM	7406	CG	GLN	A	945	64.869	62.523	-28.233	1.00	22.92	A
35	ATOM	7407	CD	GLN	A	945	64.602	61.784	-29.534	1.00	24.47	A
	ATOM	7408	OE1	GLN	A	945	63.852	62.257	-30.393	1.00	25.99	A
	ATOM	7409	NE2	GLN	A	945	65.231	60.627	-29.693	1.00	25.24	A
	ATOM	7410	C	GLN	A	945	66.631	63.539	-26.085	1.00	18.08	A
	ATOM	7411	O	GLN	A	945	67.823	63.289	-25.907	1.00	17.45	A
40	ATOM	7412	N	PHE	A	946	65.653	63.023	-25.348	1.00	16.69	A
	ATOM	7413	CA	PHE	A	946	65.890	62.056	-24.288	1.00	16.10	A
	ATOM	7414	CB	PHE	A	946	65.869	62.717	-22.906	1.00	16.05	A
	ATOM	7415	CG	PHE	A	946	65.756	61.730	-21.774	1.00	16.43	A
	ATOM	7416	CD1	PHE	A	946	66.783	60.826	-21.518	1.00	16.58	A
45	ATOM	7417	CD2	PHE	A	946	64.595	61.659	-21.008	1.00	16.91	A
	ATOM	7418	CE1	PHE	A	946	66.657	59.854	-20.514	1.00	17.50	A
	ATOM	7419	CE2	PHE	A	946	64.454	60.696	-20.003	1.00	17.48	A
	ATOM	7420	CZ	PHE	A	946	65.489	59.788	-19.755	1.00	17.10	A
	ATOM	7421	C	PHE	A	946	64.793	61.004	-24.345	1.00	15.93	A
50	ATOM	7422	O	PHE	A	946	63.613	61.334	-24.472	1.00	15.13	A
	ATOM	7423	N	GLY	A	947	65.189	59.737	-24.256	1.00	16.02	A
	ATOM	7424	CA	GLY	A	947	64.226	58.653	-24.275	1.00	15.95	A
	ATOM	7425	C	GLY	A	947	63.868	58.094	-25.635	1.00	16.90	A
	ATOM	7426	O	GLY	A	947	62.901	57.345	-25.758	1.00	16.77	A
55	ATOM	7427	N	GLY	A	948	64.634	58.450	-26.661	1.00	17.57	A
	ATOM	7428	CA	GLY	A	948	64.347	57.938	-27.987	1.00	18.79	A
	ATOM	7429	C	GLY	A	948	64.376	56.422	-28.010	1.00	19.63	A
	ATOM	7430	O	GLY	A	948	63.774	55.793	-28.879	1.00	20.35	A
	ATOM	7431	N	ASP	A	949	65.070	55.831	-27.043	1.00	20.59	A

	ATOM	7432	CA	ASP	A	949	65.182	54.381	-26.961	1.00	21.92	A
	ATOM	7433	CB	ASP	A	949	66.603	53.991	-26.538	1.00	23.50	A
	ATOM	7434	CG	ASP	A	949	66.942	54.453	-25.134	1.00	25.82	A
5	ATOM	7435	OD1	ASP	A	949	66.489	55.550	-24.737	1.00	26.87	A
	ATOM	7436	OD2	ASP	A	949	67.673	53.726	-24.429	1.00	28.01	A
	ATOM	7437	C	ASP	A	949	64.164	53.755	-26.007	1.00	21.81	A
	ATOM	7438	O	ASP	A	949	64.149	52.535	-25.829	1.00	22.12	A
	ATOM	7439	N	HIS	A	950	63.320	54.579	-25.387	1.00	20.91	A
10	ATOM	7440	CA	HIS	A	950	62.304	54.051	-24.476	1.00	20.31	A
	ATOM	7441	CB	HIS	A	950	61.564	55.173	-23.741	1.00	19.60	A
	ATOM	7442	CG	HIS	A	950	62.390	55.898	-22.725	1.00	18.82	A
	ATOM	7443	CD2	HIS	A	950	62.137	57.027	-22.023	1.00	17.61	A
	ATOM	7444	ND1	HIS	A	950	63.626	55.457	-22.308	1.00	19.62	A
15	ATOM	7445	CE1	HIS	A	950	64.101	56.285	-21.394	1.00	18.39	A
	ATOM	7446	NE2	HIS	A	950	63.216	57.245	-21.203	1.00	19.83	A
	ATOM	7447	C	HIS	A	950	61.279	53.276	-25.294	1.00	20.04	A
	ATOM	7448	O	HIS	A	950	60.911	53.693	-26.389	1.00	20.31	A
	ATOM	7449	N	PRO	A	951	60.806	52.133	-24.776	1.00	20.23	A
20	ATOM	7450	CD	PRO	A	951	61.345	51.371	-23.634	1.00	20.95	A
	ATOM	7451	CA	PRO	A	951	59.813	51.343	-25.507	1.00	19.76	A
	ATOM	7452	CB	PRO	A	951	59.683	50.081	-24.655	1.00	20.56	A
	ATOM	7453	CG	PRO	A	951	61.048	49.953	-24.038	1.00	20.81	A
	ATOM	7454	C	PRO	A	951	58.488	52.100	-25.622	1.00	19.07	A
25	ATOM	7455	O	PRO	A	951	58.066	52.771	-24.679	1.00	18.22	A
	ATOM	7456	N	SER	A	952	57.842	52.003	-26.780	1.00	18.29	A
	ATOM	7457	CA	SER	A	952	56.561	52.670	-26.996	1.00	18.67	A
	ATOM	7458	CB	SER	A	952	56.487	53.235	-28.418	1.00	18.74	A
	ATOM	7459	OG	SER	A	952	55.403	54.137	-28.564	1.00	18.56	A
30	ATOM	7460	C	SER	A	952	55.493	51.605	-26.791	1.00	19.01	A
	ATOM	7461	O	SER	A	952	55.198	50.824	-27.701	1.00	19.67	A
	ATOM	7462	N	ALA	A	953	54.920	51.581	-25.589	1.00	18.23	A
	ATOM	7463	CA	ALA	A	953	53.916	50.591	-25.214	1.00	17.70	A
	ATOM	7464	CB	ALA	A	953	53.744	50.589	-23.699	1.00	16.83	A
35	ATOM	7465	C	ALA	A	953	52.553	50.731	-25.874	1.00	17.59	A
	ATOM	7466	O	ALA	A	953	52.178	51.804	-26.349	1.00	16.84	A
	ATOM	7467	N	ARG	A	954	51.813	49.625	-25.874	1.00	17.23	A
	ATOM	7468	CA	ARG	A	954	50.476	49.572	-26.443	1.00	18.11	A
	ATOM	7469	CB	ARG	A	954	49.859	48.202	-26.170	1.00	21.07	A
40	ATOM	7470	CG	ARG	A	954	48.514	47.967	-26.832	1.00	25.46	A
	ATOM	7471	CD	ARG	A	954	48.386	46.508	-27.244	1.00	29.24	A
	ATOM	7472	NE	ARG	A	954	46.998	46.084	-27.381	1.00	32.43	A
	ATOM	7473	CZ	ARG	A	954	46.192	45.838	-26.355	1.00	33.96	A
	ATOM	7474	NH1	ARG	A	954	46.641	45.975	-25.116	1.00	35.54	A
45	ATOM	7475	NH2	ARG	A	954	44.940	45.450	-26.565	1.00	35.55	A
	ATOM	7476	C	ARG	A	954	49.641	50.689	-25.821	1.00	17.03	A
	ATOM	7477	O	ARG	A	954	49.743	50.962	-24.620	1.00	15.07	A
	ATOM	7478	N	GLU	A	955	48.809	51.319	-26.646	1.00	16.23	A
	ATOM	7479	CA	GLU	A	955	47.995	52.460	-26.226	1.00	16.38	A
50	ATOM	7480	CB	GLU	A	955	47.110	52.917	-27.389	1.00	17.11	A
	ATOM	7481	CG	GLU	A	955	45.917	52.024	-27.646	1.00	19.34	A
	ATOM	7482	CD	GLU	A	955	45.092	52.493	-28.823	1.00	20.46	A
	ATOM	7483	OE1	GLU	A	955	44.961	53.721	-29.014	1.00	22.05	A
	ATOM	7484	OE2	GLU	A	955	44.564	51.632	-29.551	1.00	21.62	A
	ATOM	7485	C	GLU	A	955	47.136	52.326	-24.971	1.00	15.39	A
55	ATOM	7486	O	GLU	A	955	46.846	53.328	-24.324	1.00	14.75	A

	ATOM	7487	N	ASP	A	956	46.722	51.114	-24.617	1.00	15.12	A
	ATOM	7488	CA	ASP	A	956	45.892	50.957	-23.425	1.00	15.34	A
	ATOM	7489	CB	ASP	A	956	44.895	49.793	-23.595	1.00	15.33	A
	ATOM	7490	CG	ASP	A	956	45.572	48.461	-23.883	1.00	16.25	A
5	ATOM	7491	OD1	ASP	A	956	46.815	48.419	-24.002	1.00	16.76	A
	ATOM	7492	OD2	ASP	A	956	44.847	47.446	-23.995	1.00	16.97	A
	ATOM	7493	C	ASP	A	956	46.714	50.777	-22.152	1.00	14.55	A
	ATOM	7494	O	ASP	A	956	46.161	50.593	-21.067	1.00	15.14	A
	ATOM	7495	N	LEU	A	957	48.035	50.847	-22.279	1.00	14.22	A
0	ATOM	7496	CA	LEU	A	957	48.907	50.701	-21.119	1.00	13.40	A
	ATOM	7497	CB	LEU	A	957	50.043	49.719	-21.421	1.00	14.46	A
	ATOM	7498	CG	LEU	A	957	50.898	49.274	-20.228	1.00	16.61	A
	ATOM	7499	CD1	LEU	A	957	50.032	48.511	-19.227	1.00	17.21	A
	ATOM	7500	CD2	LEU	A	957	52.040	48.387	-20.711	1.00	16.91	A
5	ATOM	7501	C	LEU	A	957	49.500	52.048	-20.724	1.00	12.80	A
	ATOM	7502	O	LEU	A	957	49.850	52.857	-21.582	1.00	12.44	A
	ATOM	7503	N	ASP	A	958	49.607	52.289	-19.421	1.00	11.71	A
	ATOM	7504	CA	ASP	A	958	50.186	53.535	-18.936	1.00	11.33	A
	ATOM	7505	CB	ASP	A	958	49.078	54.535	-18.566	1.00	11.55	A
0	ATOM	7506	CG	ASP	A	958	49.623	55.918	-18.216	1.00	11.50	A
	ATOM	7507	OD1	ASP	A	958	50.712	56.269	-18.710	1.00	10.43	A
	ATOM	7508	OD2	ASP	A	958	48.952	56.657	-17.458	1.00	11.83	A
	ATOM	7509	C	ASP	A	958	51.060	53.274	-17.718	1.00	11.04	A
	ATOM	7510	O	ASP	A	958	50.828	52.322	-16.972	1.00	11.67	A
5	ATOM	7511	N	VAL	A	959	52.095	54.091	-17.558	1.00	10.57	A
	ATOM	7512	CA	VAL	A	959	52.967	54.015	-16.392	1.00	10.41	A
	ATOM	7513	CB	VAL	A	959	54.442	54.315	-16.747	1.00	11.51	A
	ATOM	7514	CG1	VAL	A	959	55.281	54.462	-15.461	1.00	11.36	A
	ATOM	7515	CG2	VAL	A	959	55.003	53.187	-17.605	1.00	11.45	A
0	ATOM	7516	C	VAL	A	959	52.401	55.148	-15.539	1.00	10.64	A
	ATOM	7517	O	VAL	A	959	52.819	56.301	-15.655	1.00	10.64	A
	ATOM	7518	N	SER	A	960	51.413	54.810	-14.715	1.00	10.31	A
	ATOM	7519	CA	SER	A	960	50.737	55.779	-13.854	1.00	10.37	A
	ATOM	7520	CB	SER	A	960	49.642	55.072	-13.048	1.00	9.61	A
5	ATOM	7521	OG	SER	A	960	48.815	54.293	-13.899	1.00	10.39	A
	ATOM	7522	C	SER	A	960	51.687	56.485	-12.899	1.00	10.61	A
	ATOM	7523	O	SER	A	960	51.541	57.684	-12.624	1.00	10.54	A
	ATOM	7524	N	VAL	A	961	52.649	55.731	-12.386	1.00	10.80	A
	ATOM	7525	CA	VAL	A	961	53.624	56.267	-11.449	1.00	11.36	A
0	ATOM	7526	CB	VAL	A	961	53.239	55.948	-9.971	1.00	11.55	A
	ATOM	7527	CG1	VAL	A	961	54.337	56.447	-9.019	1.00	12.60	A
	ATOM	7528	CG2	VAL	A	961	51.898	56.591	-9.615	1.00	10.23	A
	ATOM	7529	C	VAL	A	961	55.008	55.681	-11.680	1.00	11.90	A
	ATOM	7530	O	VAL	A	961	55.159	54.481	-11.935	1.00	11.41	A
5	ATOM	7531	N	MET	A	962	56.008	56.555	-11.615	1.00	11.23	A
	ATOM	7532	CA	MET	A	962	57.402	56.166	-11.705	1.00	11.17	A
	ATOM	7533	CB	MET	A	962	58.056	56.592	-13.017	1.00	11.57	A
	ATOM	7534	CG	MET	A	962	59.531	56.213	-13.042	1.00	13.15	A
	ATOM	7535	SD	MET	A	962	60.354	56.539	-14.597	1.00	12.96	A
0	ATOM	7536	CE	MET	A	962	62.025	55.936	-14.249	1.00	13.82	A
	ATOM	7537	C	MET	A	962	58.006	56.954	-10.555	1.00	11.31	A
	ATOM	7538	O	MET	A	962	57.985	58.186	-10.561	1.00	11.39	A
	ATOM	7539	N	ARG	A	963	58.524	56.247	-9.559	1.00	11.55	A
	ATOM	7540	CA	ARG	A	963	59.078	56.909	-8.387	1.00	11.46	A
5	ATOM	7541	CB	ARG	A	963	58.004	56.968	-7.285	1.00	12.00	A

5	ATOM	7542	CG	ARG	A	963	58.487	57.451	-5.911	1.00	12.06	A
	ATOM	7543	CD	ARG	A	963	57.365	57.332	-4.865	1.00	12.84	A
	ATOM	7544	NE	ARG	A	963	56.177	58.061	-5.303	1.00	11.77	A
	ATOM	7545	CZ	ARG	A	963	54.932	57.600	-5.231	1.00	11.37	A
	ATOM	7546	NH1	ARG	A	963	54.681	56.400	-4.719	1.00	10.90	A
10	ATOM	7547	NH2	ARG	A	963	53.938	58.326	-5.723	1.00	9.67	A
	ATOM	7548	C	ARG	A	963	60.304	56.203	-7.846	1.00	11.53	A
	ATOM	7549	O	ARG	A	963	60.241	55.021	-7.522	1.00	11.39	A
	ATOM	7550	N	ARG	A	964	61.423	56.920	-7.756	1.00	12.34	A
	ATOM	7551	CA	ARG	A	964	62.629	56.323	-7.191	1.00	12.88	A
15	ATOM	7552	CB	ARG	A	964	63.861	57.200	-7.444	1.00	12.19	A
	ATOM	7553	CG	ARG	A	964	65.153	56.591	-6.891	1.00	12.53	A
	ATOM	7554	CD	ARG	A	964	66.387	57.332	-7.390	1.00	12.58	A
	ATOM	7555	NE	ARG	A	964	66.594	57.155	-8.827	1.00	13.49	A
	ATOM	7556	CZ	ARG	A	964	67.474	56.317	-9.367	1.00	14.26	A
20	ATOM	7557	NH1	ARG	A	964	68.246	55.561	-8.595	1.00	14.57	A
	ATOM	7558	NH2	ARG	A	964	67.597	56.245	-10.686	1.00	14.48	A
	ATOM	7559	C	ARG	A	964	62.314	56.255	-5.702	1.00	12.97	A
	ATOM	7560	O	ARG	A	964	61.874	57.243	-5.109	1.00	13.45	A
	ATOM	7561	N	LEU	A	965	62.531	55.089	-5.104	1.00	12.82	A
25	ATOM	7562	CA	LEU	A	965	62.205	54.871	-3.697	1.00	12.51	A
	ATOM	7563	CB	LEU	A	965	61.550	53.494	-3.547	1.00	12.65	A
	ATOM	7564	CG	LEU	A	965	60.338	53.224	-4.448	1.00	12.27	A
	ATOM	7565	CD1	LEU	A	965	59.993	51.743	-4.424	1.00	11.69	A
	ATOM	7566	CD2	LEU	A	965	59.151	54.071	-3.986	1.00	12.48	A
30	ATOM	7567	C	LEU	A	965	63.382	54.975	-2.732	1.00	13.34	A
	ATOM	7568	O	LEU	A	965	63.197	54.895	-1.517	1.00	12.58	A
	ATOM	7569	N	THR	A	966	64.583	55.160	-3.271	1.00	12.89	A
	ATOM	7570	CA	THR	A	966	65.779	55.252	-2.444	1.00	14.47	A
	ATOM	7571	CB	THR	A	966	66.766	54.113	-2.774	1.00	14.67	A
35	ATOM	7572	OG1	THR	A	966	66.992	54.075	-4.189	1.00	15.14	A
	ATOM	7573	CG2	THR	A	966	66.214	52.770	-2.315	1.00	14.12	A
	ATOM	7574	C	THR	A	966	66.527	56.566	-2.619	1.00	15.23	A
	ATOM	7575	O	THR	A	966	66.504	57.166	-3.695	1.00	14.67	A
	ATOM	7576	N	LYS	A	967	67.187	57.005	-1.553	1.00	15.85	A
40	ATOM	7577	CA	LYS	A	967	67.984	58.221	-1.603	1.00	17.59	A
	ATOM	7578	CB	LYS	A	967	68.095	58.847	-0.213	1.00	18.92	A
	ATOM	7579	CG	LYS	A	967	66.756	59.361	0.317	1.00	21.33	A
	ATOM	7580	CD	LYS	A	967	66.940	60.188	1.576	1.00	23.62	A
	ATOM	7581	CE	LYS	A	967	65.629	60.790	2.045	1.00	25.85	A
45	ATOM	7582	NZ	LYS	A	967	65.838	61.623	3.264	1.00	28.29	A
	ATOM	7583	C	LYS	A	967	69.362	57.835	-2.151	1.00	17.80	A
	ATOM	7584	O	LYS	A	967	69.672	56.649	-2.267	1.00	17.70	A
	ATOM	7585	N	SER	A	968	70.181	58.828	-2.484	1.00	18.45	A
	ATOM	7586	CA	SER	A	968	71.495	58.576	-3.074	1.00	19.54	A
50	ATOM	7587	CB	SER	A	968	72.170	59.903	-3.443	1.00	19.67	A
	ATOM	7588	OG	SER	A	968	72.503	60.649	-2.287	1.00	21.14	A
	ATOM	7589	C	SER	A	968	72.480	57.732	-2.263	1.00	20.02	A
	ATOM	7590	O	SER	A	968	73.350	57.084	-2.841	1.00	20.37	A
	ATOM	7591	N	SER	A	969	72.348	57.726	-0.942	1.00	20.75	A
55	ATOM	7592	CA	SER	A	969	73.271	56.961	-0.100	1.00	21.87	A
	ATOM	7593	CB	SER	A	969	73.197	57.456	1.346	1.00	22.66	A
	ATOM	7594	OG	SER	A	969	71.899	57.264	1.880	1.00	25.79	A
	ATOM	7595	C	SER	A	969	73.054	55.447	-0.125	1.00	21.74	A
	ATOM	7596	O	SER	A	969	73.905	54.688	0.346	1.00	21.39	A

5	ATOM	7597	N	ALA	A	970	71.926	55.008	-0.676	1.00	21.45	A
	ATOM	7598	CA	ALA	A	970	71.613	53.580	-0.741	1.00	21.30	A
	ATOM	7599	CB	ALA	A	970	70.122	53.385	-1.012	1.00	21.26	A
	ATOM	7600	C	ALA	A	970	72.429	52.823	-1.786	1.00	21.32	A
	ATOM	7601	O	ALA	A	970	72.369	53.132	-2.979	1.00	21.38	A
	ATOM	7602	N	LYS	A	971	73.186	51.825	-1.334	1.00	21.84	A
	ATOM	7603	CA	LYS	A	971	74.003	51.011	-2.232	1.00	21.84	A
	ATOM	7604	CB	LYS	A	971	74.683	49.874	-1.464	1.00	23.71	A
10	ATOM	7605	CG	LYS	A	971	76.011	50.243	-0.817	1.00	26.65	A
	ATOM	7606	CD	LYS	A	971	76.600	49.058	-0.056	1.00	27.50	A
	ATOM	7607	CE	LYS	A	971	76.656	47.801	-0.922	1.00	28.39	A
	ATOM	7608	NZ	LYS	A	971	77.431	47.996	-2.177	1.00	29.71	A
	ATOM	7609	C	LYS	A	971	73.144	50.415	-3.335	1.00	21.02	A
	ATOM	7610	O	LYS	A	971	73.519	50.434	-4.506	1.00	20.93	A
15	ATOM	7611	N	THR	A	972	71.997	49.862	-2.953	1.00	19.58	A
	ATOM	7612	CA	THR	A	972	71.087	49.279	-3.923	1.00	18.21	A
	ATOM	7613	CB	THR	A	972	70.526	47.917	-3.436	1.00	18.71	A
	ATOM	7614	OG1	THR	A	972	71.604	46.985	-3.270	1.00	18.53	A
20	ATOM	7615	CG2	THR	A	972	69.545	47.345	-4.454	1.00	18.65	A
	ATOM	7616	C	THR	A	972	69.936	50.252	-4.157	1.00	17.31	A
	ATOM	7617	O	THR	A	972	69.116	50.492	-3.266	1.00	16.03	A
	ATOM	7618	N	GLN	A	973	69.895	50.830	-5.352	1.00	16.37	A
	ATOM	7619	CA	GLN	A	973	68.842	51.772	-5.699	1.00	16.12	A
25	ATOM	7620	CB	GLN	A	973	69.288	52.673	-6.854	1.00	15.55	A
	ATOM	7621	CG	GLN	A	973	70.386	53.651	-6.475	1.00	15.07	A
	ATOM	7622	CD	GLN	A	973	69.945	54.648	-5.422	1.00	15.76	A
	ATOM	7623	OE1	GLN	A	973	70.600	54.812	-4.389	1.00	17.45	A
	ATOM	7624	NE2	GLN	A	973	68.835	55.329	-5.680	1.00	14.14	A
30	ATOM	7625	C	GLN	A	973	67.572	51.030	-6.086	1.00	15.69	A
	ATOM	7626	O	GLN	A	973	67.623	49.947	-6.670	1.00	15.91	A
	ATOM	7627	N	ARG	A	974	66.432	51.621	-5.752	1.00	15.66	A
	ATOM	7628	CA	ARG	A	974	65.150	51.019	-6.067	1.00	15.61	A
	ATOM	7629	CB	ARG	A	974	64.501	50.477	-4.793	1.00	16.37	A
35	ATOM	7630	CG	ARG	A	974	65.322	49.406	-4.075	1.00	18.08	A
	ATOM	7631	CD	ARG	A	974	64.715	49.070	-2.711	1.00	19.28	A
	ATOM	7632	NE	ARG	A	974	63.449	48.345	-2.819	1.00	21.95	A
	ATOM	7633	CZ	ARG	A	974	62.324	48.706	-2.208	1.00	22.67	A
	ATOM	7634	NH1	ARG	A	974	62.297	49.790	-1.443	1.00	23.60	A
40	ATOM	7635	NH2	ARG	A	974	61.225	47.978	-2.353	1.00	22.90	A
	ATOM	7636	C	ARG	A	974	64.226	52.034	-6.727	1.00	14.98	A
	ATOM	7637	O	ARG	A	974	64.137	53.191	-6.296	1.00	14.44	A
	ATOM	7638	N	VAL	A	975	63.547	51.594	-7.780	1.00	14.27	A
	ATOM	7639	CA	VAL	A	975	62.615	52.449	-8.500	1.00	13.77	A
45	ATOM	7640	CB	VAL	A	975	63.149	52.808	-9.908	1.00	14.20	A
	ATOM	7641	CG1	VAL	A	975	62.161	53.726	-10.628	1.00	13.31	A
	ATOM	7642	CG2	VAL	A	975	64.502	53.493	-9.783	1.00	13.27	A
	ATOM	7643	C	VAL	A	975	61.295	51.706	-8.624	1.00	13.49	A
	ATOM	7644	O	VAL	A	975	61.251	50.561	-9.084	1.00	13.35	A
50	ATOM	7645	N	GLY	A	976	60.220	52.360	-8.196	1.00	13.11	A
	ATOM	7646	CA	GLY	A	976	58.911	51.741	-8.252	1.00	11.84	A
	ATOM	7647	C	GLY	A	976	58.063	52.232	-9.406	1.00	11.62	A
	ATOM	7648	O	GLY	A	976	58.130	53.404	-9.800	1.00	11.25	A
	ATOM	7649	N	TYR	A	977	57.263	51.324	-9.949	1.00	11.21	A
	ATOM	7650	CA	TYR	A	977	56.381	51.637	-11.062	1.00	11.69	A
55	ATOM	7651	CB	TYR	A	977	56.870	50.992	-12.362	1.00	11.44	A

5	ATOM	7652	CG	TYR	A	977	58.265	51.359	-12.787	1.00	12.42	A
	ATOM	7653	CD1	TYR	A	977	59.372	50.674	-12.286	1.00	12.45	A
	ATOM	7654	CE1	TYR	A	977	60.669	51.011	-12.691	1.00	12.91	A
	ATOM	7655	CD2	TYR	A	977	58.482	52.390	-13.700	1.00	12.69	A
	ATOM	7656	CE2	TYR	A	977	59.764	52.735	-14.108	1.00	12.73	A
	ATOM	7657	CZ	TYR	A	977	60.853	52.047	-13.604	1.00	13.25	A
	ATOM	7658	OH	TYR	A	977	62.124	52.406	-14.009	1.00	12.80	A
	ATOM	7659	C	TYR	A	977	54.981	51.110	-10.823	1.00	11.50	A
10	ATOM	7660	O	TYR	A	977	54.805	49.989	-10.347	1.00	11.45	A
	ATOM	7661	N	VAL	A	978	53.985	51.921	-11.157	1.00	11.25	A
	ATOM	7662	CA	VAL	A	978	52.607	51.483	-11.058	1.00	11.69	A
	ATOM	7663	CB	VAL	A	978	51.729	52.453	-10.250	1.00	12.09	A
15	ATOM	7664	CG1	VAL	A	978	50.267	52.034	-10.360	1.00	11.83	A
	ATOM	7665	CG2	VAL	A	978	52.160	52.438	-8.784	1.00	11.63	A
	ATOM	7666	C	VAL	A	978	52.148	51.447	-12.512	1.00	12.55	A
	ATOM	7667	O	VAL	A	978	52.174	52.463	-13.209	1.00	11.76	A
20	ATOM	7668	N	LEU	A	979	51.775	50.256	-12.968	1.00	12.63	A
	ATOM	7669	CA	LEU	A	979	51.330	50.048	-14.337	1.00	14.77	A
	ATOM	7670	CB	LEU	A	979	52.064	48.855	-14.957	1.00	16.74	A
	ATOM	7671	CG	LEU	A	979	53.380	49.107	-15.694	1.00	19.88	A
	ATOM	7672	CD1	LEU	A	979	53.085	49.751	-17.036	1.00	20.58	A
	ATOM	7673	CD2	LEU	A	979	54.293	49.986	-14.851	1.00	21.07	A
25	ATOM	7674	C	LEU	A	979	49.841	49.786	-14.406	1.00	14.34	A
	ATOM	7675	O	LEU	A	979	49.334	48.872	-13.760	1.00	14.54	A
	ATOM	7676	N	HIS	A	980	49.140	50.587	-15.196	1.00	13.95	A
	ATOM	7677	CA	HIS	A	980	47.713	50.388	-15.347	1.00	13.39	A
	ATOM	7678	CB	HIS	A	980	46.922	51.586	-14.823	1.00	13.91	A
	ATOM	7679	CG	HIS	A	980	45.444	51.434	-14.999	1.00	14.48	A
30	ATOM	7680	CD2	HIS	A	980	44.542	50.693	-14.315	1.00	13.79	A
	ATOM	7681	ND1	HIS	A	980	44.752	52.011	-16.042	1.00	15.45	A
	ATOM	7682	CE1	HIS	A	980	43.488	51.631	-15.993	1.00	14.19	A
	ATOM	7683	NE2	HIS	A	980	43.334	50.829	-14.955	1.00	15.58	A
	ATOM	7684	C	HIS	A	980	47.337	50.152	-16.798	1.00	13.58	A
35	ATOM	7685	O	HIS	A	980	47.783	50.871	-17.689	1.00	13.07	A
	ATOM	7686	N	ARG	A	981	46.521	49.131	-17.026	1.00	13.43	A
	ATOM	7687	CA	ARG	A	981	46.053	48.830	-18.367	1.00	14.40	A
	ATOM	7688	CB	ARG	A	981	46.438	47.411	-18.777	1.00	16.66	A
	ATOM	7689	CG	ARG	A	981	46.067	47.071	-20.213	1.00	20.47	A
40	ATOM	7690	CD	ARG	A	981	46.616	45.714	-20.602	1.00	22.48	A
	ATOM	7691	NE	ARG	A	981	46.190	45.316	-21.939	1.00	25.91	A
	ATOM	7692	CZ	ARG	A	981	46.447	44.124	-22.475	1.00	27.69	A
	ATOM	7693	NH1	ARG	A	981	47.129	43.217	-21.787	1.00	27.99	A
	ATOM	7694	NH2	ARG	A	981	46.017	43.836	-23.698	1.00	28.19	A
45	ATOM	7695	C	ARG	A	981	44.541	48.973	-18.351	1.00	13.60	A
	ATOM	7696	O	ARG	A	981	43.850	48.296	-17.592	1.00	14.15	A
	ATOM	7697	N	THR	A	982	44.031	49.881	-19.170	1.00	13.91	A
	ATOM	7698	CA	THR	A	982	42.597	50.105	-19.252	1.00	13.49	A
	ATOM	7699	CB	THR	A	982	42.303	51.560	-19.691	1.00	13.43	A
50	ATOM	7700	OG1	THR	A	982	40.900	51.825	-19.587	1.00	13.78	A
	ATOM	7701	CG2	THR	A	982	42.764	51.791	-21.128	1.00	13.65	A
	ATOM	7702	C	THR	A	982	42.074	49.117	-20.293	1.00	14.08	A
	ATOM	7703	O	THR	A	982	42.817	48.244	-20.743	1.00	13.64	A
	ATOM	7704	N	ASN	A	983	40.798	49.226	-20.652	1.00	13.57	A
55	ATOM	7705	CA	ASN	A	983	40.236	48.346	-21.670	1.00	13.69	A
	ATOM	7706	CB	ASN	A	983	39.218	47.366	-21.084	1.00	13.01	A

	ATOM	7707	CG	ASN	A	983	38.721	46.370	-22.119	1.00	13.68	A
	ATOM	7708	OD1	ASN	A	983	39.472	45.510	-22.573	1.00	13.48	A
	ATOM	7709	ND2	ASN	A	983	37.456	46.497	-22.513	1.00	13.45	A
5	ATOM	7710	C	ASN	A	983	39.542	49.212	-22.704	1.00	14.04	A
	ATOM	7711	O	ASN	A	983	38.623	49.957	-22.378	1.00	13.01	A
	ATOM	7712	N	LEU	A	984	39.994	49.110	-23.949	1.00	14.70	A
	ATOM	7713	CA	LEU	A	984	39.425	49.888	-25.040	1.00	16.23	A
	ATOM	7714	CB	LEU	A	984	40.536	50.572	-25.831	1.00	16.53	A
10	ATOM	7715	CG	LEU	A	984	41.501	51.426	-25.003	1.00	17.01	A
	ATOM	7716	CD1	LEU	A	984	42.580	51.988	-25.919	1.00	17.22	A
	ATOM	7717	CD2	LEU	A	984	40.735	52.542	-24.297	1.00	17.01	A
	ATOM	7718	C	LEU	A	984	38.640	48.976	-25.961	1.00	17.29	A
	ATOM	7719	O	LEU	A	984	39.058	47.854	-26.237	1.00	17.30	A
15	ATOM	7720	N	MET	A	985	37.500	49.458	-26.438	1.00	18.60	A
	ATOM	7721	CA	MET	A	985	36.673	48.656	-27.328	1.00	20.77	A
	ATOM	7722	CB	MET	A	985	35.347	49.356	-27.614	1.00	21.25	A
	ATOM	7723	CG	MET	A	985	34.437	49.491	-26.421	1.00	21.90	A
	ATOM	7724	SD	MET	A	985	32.759	49.775	-26.972	1.00	24.87	A
20	ATOM	7725	CE	MET	A	985	32.919	51.381	-27.747	1.00	22.32	A
	ATOM	7726	C	MET	A	985	37.352	48.365	-28.653	1.00	22.12	A
	ATOM	7727	O	MET	A	985	38.039	49.216	-29.220	1.00	22.17	A
	ATOM	7728	N	GLN	A	986	37.158	47.149	-29.142	1.00	23.89	A
	ATOM	7729	CA	GLN	A	986	37.712	46.758	-30.425	1.00	25.08	A
25	ATOM	7730	CB	GLN	A	986	38.079	45.271	-30.414	1.00	27.59	A
	ATOM	7731	CG	GLN	A	986	37.124	44.382	-29.638	1.00	30.79	A
	ATOM	7732	CD	GLN	A	986	37.779	43.086	-29.186	1.00	32.59	A
	ATOM	7733	OE1	GLN	A	986	37.146	42.246	-28.543	1.00	33.26	A
	ATOM	7734	NE2	GLN	A	986	39.059	42.923	-29.516	1.00	33.73	A
30	ATOM	7735	C	GLN	A	986	36.617	47.063	-31.435	1.00	24.80	A
	ATOM	7736	O	GLN	A	986	35.529	46.483	-31.386	1.00	24.42	A
	ATOM	7737	N	CYS	A	987	36.899	48.003	-32.330	1.00	23.92	A
	ATOM	7738	CA	CYS	A	987	35.922	48.412	-33.327	1.00	24.36	A
	ATOM	7739	C	CYS	A	987	36.386	48.179	-34.761	1.00	26.38	A
35	ATOM	7740	O	CYS	A	987	35.896	48.827	-35.689	1.00	26.19	A
	ATOM	7741	CB	CYS	A	987	35.583	49.888	-33.138	1.00	22.23	A
	ATOM	7742	SG	CYS	A	987	35.117	50.372	-31.445	1.00	20.59	A
	ATOM	7743	N	GLY	A	988	37.338	47.268	-34.942	1.00	28.36	A
	ATOM	7744	CA	GLY	A	988	37.814	46.963	-36.280	1.00	31.14	A
40	ATOM	7745	C	GLY	A	988	39.096	47.634	-36.730	1.00	33.50	A
	ATOM	7746	O	GLY	A	988	39.502	47.474	-37.882	1.00	33.42	A
	ATOM	7747	N	THR	A	989	39.733	48.391	-35.844	1.00	35.82	A
	ATOM	7748	CA	THR	A	989	40.981	49.060	-36.192	1.00	38.40	A
	ATOM	7749	CB	THR	A	989	41.153	50.377	-35.414	1.00	38.55	A
45	ATOM	7750	OG1	THR	A	989	40.093	51.277	-35.759	1.00	39.22	A
	ATOM	7751	CG2	THR	A	989	42.486	51.026	-35.755	1.00	38.94	A
	ATOM	7752	C	THR	A	989	42.158	48.140	-35.880	1.00	40.35	A
	ATOM	7753	O	THR	A	989	42.344	47.718	-34.738	1.00	40.39	A
	ATOM	7754	N	PRO	A	990	42.969	47.816	-36.901	1.00	42.23	A
50	ATOM	7755	CD	PRO	A	990	42.821	48.277	-38.295	1.00	42.52	A
	ATOM	7756	CA	PRO	A	990	44.139	46.943	-36.768	1.00	43.92	A
	ATOM	7757	CB	PRO	A	990	44.879	47.172	-38.079	1.00	43.82	A
	ATOM	7758	CG	PRO	A	990	43.749	47.342	-39.047	1.00	43.19	A
	ATOM	7759	C	PRO	A	990	45.011	47.221	-35.542	1.00	45.81	A
	ATOM	7760	O	PRO	A	990	45.322	46.301	-34.781	1.00	46.16	A
55	ATOM	7761	N	GLU	A	991	45.406	48.479	-35.353	1.00	47.49	A

	ATOM	7762	CA	GLU	A	991	46.240	48.856	-34.211	1.00	49.39	A
	ATOM	7763	CB	GLU	A	991	45.384	48.904	-32.942	1.00	50.54	A
	ATOM	7764	CG	GLU	A	991	44.254	49.927	-33.000	1.00	52.51	A
	ATOM	7765	CD	GLU	A	991	43.249	49.762	-31.872	1.00	53.74	A
5	ATOM	7766	OE1	GLU	A	991	43.668	49.746	-30.695	1.00	54.22	A
	ATOM	7767	OE2	GLU	A	991	42.037	49.649	-32.163	1.00	54.31	A
	ATOM	7768	C	GLU	A	991	47.386	47.857	-34.034	1.00	49.78	A
	ATOM	7769	O	GLU	A	991	47.270	46.890	-33.280	1.00	49.97	A
	ATOM	7770	N	GLU	A	992	48.495	48.103	-34.725	1.00	50.30	A
10	ATOM	7771	CA	GLU	A	992	49.640	47.202	-34.666	1.00	50.80	A
	ATOM	7772	CB	GLU	A	992	49.945	46.680	-36.073	1.00	51.80	A
	ATOM	7773	CG	GLU	A	992	48.776	45.982	-36.751	1.00	53.22	A
	ATOM	7774	CD	GLU	A	992	49.063	45.644	-38.204	1.00	54.07	A
	ATOM	7775	OE1	GLU	A	992	50.053	44.926	-38.467	1.00	54.55	A
15	ATOM	7776	OE2	GLU	A	992	48.299	46.097	-39.083	1.00	54.47	A
	ATOM	7777	C	GLU	A	992	50.913	47.810	-34.077	1.00	50.44	A
	ATOM	7778	O	GLU	A	992	50.869	48.734	-33.264	1.00	50.69	A
	ATOM	7779	N	HIS	A	993	52.042	47.259	-34.518	1.00	49.81	A
	ATOM	7780	CA	HIS	A	993	53.391	47.656	-34.116	1.00	48.87	A
20	ATOM	7781	CB	HIS	A	993	54.081	48.396	-35.277	1.00	49.88	A
	ATOM	7782	CG	HIS	A	993	53.335	49.596	-35.779	1.00	51.14	A
	ATOM	7783	CD2	HIS	A	993	52.287	50.283	-35.264	1.00	51.72	A
	ATOM	7784	ND1	HIS	A	993	53.669	50.236	-36.954	1.00	51.70	A
	ATOM	7785	CE1	HIS	A	993	52.860	51.263	-37.141	1.00	51.91	A
25	ATOM	7786	NE2	HIS	A	993	52.012	51.315	-36.130	1.00	52.16	A
	ATOM	7787	C	HIS	A	993	53.594	48.436	-32.815	1.00	47.56	A
	ATOM	7788	O	HIS	A	993	53.594	49.669	-32.802	1.00	47.73	A
	ATOM	7789	N	THR	A	994	53.783	47.695	-31.725	1.00	45.51	A
	ATOM	7790	CA	THR	A	994	54.036	48.275	-30.406	1.00	42.92	A
30	ATOM	7791	CB	THR	A	994	52.744	48.419	-29.568	1.00	43.20	A
	ATOM	7792	OG1	THR	A	994	52.156	47.129	-29.359	1.00	43.29	A
	ATOM	7793	CG2	THR	A	994	51.747	49.325	-30.277	1.00	42.99	A
	ATOM	7794	C	THR	A	994	55.006	47.354	-29.667	1.00	41.17	A
	ATOM	7795	O	THR	A	994	54.929	46.130	-29.788	1.00	41.12	A
35	ATOM	7796	N	GLN	A	995	55.920	47.945	-28.905	1.00	38.56	A
	ATOM	7797	CA	GLN	A	995	56.913	47.173	-28.171	1.00	35.93	A
	ATOM	7798	CB	GLN	A	995	58.205	47.974	-28.040	1.00	36.57	A
	ATOM	7799	CG	GLN	A	995	58.663	48.637	-29.320	1.00	37.34	A
	ATOM	7800	CD	GLN	A	995	59.782	49.622	-29.072	1.00	38.00	A
40	ATOM	7801	OE1	GLN	A	995	60.896	49.239	-28.706	1.00	38.62	A
	ATOM	7802	NE2	GLN	A	995	59.488	50.904	-29.255	1.00	36.97	A
	ATOM	7803	C	GLN	A	995	56.442	46.789	-26.777	1.00	33.93	A
	ATOM	7804	O	GLN	A	995	55.653	47.500	-26.154	1.00	33.07	A
	ATOM	7805	N	LYS	A	996	56.938	45.660	-26.289	1.00	31.39	A
45	ATOM	7806	CA	LYS	A	996	56.590	45.209	-24.954	1.00	29.57	A
	ATOM	7807	CB	LYS	A	996	57.060	43.768	-24.736	1.00	30.91	A
	ATOM	7808	CG	LYS	A	996	56.341	42.743	-25.602	1.00	32.81	A
	ATOM	7809	CD	LYS	A	996	54.854	42.682	-25.265	1.00	34.20	A
	ATOM	7810	CE	LYS	A	996	54.150	41.601	-26.067	1.00	34.76	A
50	ATOM	7811	NZ	LYS	A	996	54.719	40.254	-25.779	1.00	35.51	A
	ATOM	7812	C	LYS	A	996	57.299	46.139	-23.981	1.00	27.27	A
	ATOM	7813	O	LYS	A	996	58.473	46.462	-24.167	1.00	26.17	A
	ATOM	7814	N	LEU	A	997	56.585	46.584	-22.954	1.00	25.15	A
	ATOM	7815	CA	LEU	A	997	57.181	47.470	-21.968	1.00	23.54	A
55	ATOM	7816	CB	LEU	A	997	56.211	48.595	-21.592	1.00	23.51	A

5	ATOM	7817	CG	LEU	A	997	56.692	49.527	-20.469	1.00	23.27	A
	ATOM	7818	CD1	LEU	A	997	57.965	50.247	-20.895	1.00	23.38	A
	ATOM	7819	CD2	LEU	A	997	55.599	50.530	-20.132	1.00	22.41	A
	ATOM	7820	C	LEU	A	997	57.573	46.705	-20.716	1.00	22.50	A
	ATOM	7821	O	LEU	A	997	56.723	46.139	-20.032	1.00	22.25	A
10	ATOM	7822	N	ASP	A	998	58.871	46.683	-20.433	1.00	21.36	A
	ATOM	7823	CA	ASP	A	998	59.398	46.018	-19.249	1.00	21.23	A
	ATOM	7824	CB	ASP	A	998	60.477	45.001	-19.635	1.00	21.93	A
	ATOM	7825	CG	ASP	A	998	61.146	44.373	-18.426	1.00	22.40	A
	ATOM	7826	OD1	ASP	A	998	62.161	43.667	-18.611	1.00	22.65	A
15	ATOM	7827	OD2	ASP	A	998	60.658	44.581	-17.292	1.00	22.00	A
	ATOM	7828	C	ASP	A	998	60.009	47.121	-18.396	1.00	20.26	A
	ATOM	7829	O	ASP	A	998	61.182	47.459	-18.553	1.00	19.78	A
	ATOM	7830	N	VAL	A	999	59.210	47.689	-17.500	1.00	19.60	A
	ATOM	7831	CA	VAL	A	999	59.687	48.774	-16.655	1.00	18.89	A
20	ATOM	7832	CB	VAL	A	999	58.575	49.289	-15.701	1.00	18.56	A
	ATOM	7833	CG1	VAL	A	999	57.399	49.796	-16.515	1.00	18.40	A
	ATOM	7834	CG2	VAL	A	999	58.136	48.191	-14.743	1.00	17.96	A
	ATOM	7835	C	VAL	A	999	60.918	48.419	-15.829	1.00	19.06	A
	ATOM	7836	O	VAL	A	999	61.682	49.303	-15.441	1.00	18.30	A
25	ATOM	7837	N	CYS	A1000		61.130	47.136	-15.563	1.00	19.10	A
	ATOM	7838	CA	CYS	A1000		62.291	46.767	-14.772	1.00	20.40	A
	ATOM	7839	C	CYS	A1000		63.615	46.972	-15.502	1.00	19.66	A
	ATOM	7840	O	CYS	A1000		64.669	46.995	-14.877	1.00	19.22	A
	ATOM	7841	CB	CYS	A1000		62.157	45.333	-14.258	1.00	21.94	A
30	ATOM	7842	SG	CYS	A1000		61.388	45.277	-12.599	1.00	25.12	A
	ATOM	7843	N	HIS	A1001		63.566	47.136	-16.821	1.00	20.20	A
	ATOM	7844	CA	HIS	A1001		64.793	47.372	-17.577	1.00	20.55	A
	ATOM	7845	CB	HIS	A1001		64.928	46.373	-18.729	1.00	20.76	A
	ATOM	7846	CG	HIS	A1001		65.456	45.039	-18.305	1.00	20.70	A
35	ATOM	7847	CD2	HIS	A1001		66.715	44.542	-18.298	1.00	20.88	A
	ATOM	7848	ND1	HIS	A1001		64.656	44.060	-17.756	1.00	20.78	A
	ATOM	7849	CE1	HIS	A1001		65.399	43.019	-17.427	1.00	20.46	A
	ATOM	7850	NE2	HIS	A1001		66.653	43.285	-17.745	1.00	21.10	A
	ATOM	7851	C	HIS	A1001		64.903	48.800	-18.109	1.00	20.63	A
40	ATOM	7852	O	HIS	A1001		65.752	49.092	-18.953	1.00	21.06	A
	ATOM	7853	N	LEU	A1002		64.048	49.693	-17.617	1.00	20.58	A
	ATOM	7854	CA	LEU	A1002		64.087	51.088	-18.048	1.00	20.34	A
	ATOM	7855	CB	LEU	A1002		62.875	51.855	-17.518	1.00	20.22	A
	ATOM	7856	CG	LEU	A1002		61.592	51.670	-18.332	1.00	19.58	A
45	ATOM	7857	CD1	LEU	A1002		60.440	52.384	-17.647	1.00	18.77	A
	ATOM	7858	CD2	LEU	A1002		61.801	52.212	-19.741	1.00	19.29	A
	ATOM	7859	C	LEU	A1002		65.371	51.737	-17.557	1.00	21.19	A
	ATOM	7860	O	LEU	A1002		65.920	52.622	-18.212	1.00	21.36	A
	ATOM	7861	N	LEU	A1003		65.840	51.298	-16.393	1.00	21.04	A
50	ATOM	7862	CA	LEU	A1003		67.087	51.802	-15.835	1.00	21.46	A
	ATOM	7863	CB	LEU	A1003		66.902	52.223	-14.377	1.00	22.21	A
	ATOM	7864	CG	LEU	A1003		66.045	53.476	-14.175	1.00	23.70	A
	ATOM	7865	CD1	LEU	A1003		65.966	53.806	-12.703	1.00	24.51	A
	ATOM	7866	CD2	LEU	A1003		66.650	54.644	-14.938	1.00	25.02	A
55	ATOM	7867	C	LEU	A1003		68.111	50.677	-15.944	1.00	21.41	A
	ATOM	7868	O	LEU	A1003		67.774	49.503	-15.789	1.00	20.58	A
	ATOM	7869	N	PRO	A1004		69.376	51.021	-16.220	1.00	21.54	A
	ATOM	7870	CD	PRO	A1004		69.907	52.386	-16.399	1.00	21.59	A
	ATOM	7871	CA	PRO	A1004		70.445	50.029	-16.360	1.00	21.82	A

5	ATOM	7872	CB	PRO	A1004	71.565	50.837	-17.005	1.00	22.03	A
	ATOM	7873	CG	PRO	A1004	71.412	52.162	-16.331	1.00	21.74	A
	ATOM	7874	C	PRO	A1004	70.901	49.362	-15.070	1.00	22.14	A
	ATOM	7875	O	PRO	A1004	70.577	49.809	-13.964	1.00	21.00	A
	ATOM	7876	N	ASN	A1005	71.649	48.274	-15.235	1.00	22.33	A
10	ATOM	7877	CA	ASN	A1005	72.208	47.531	-14.114	1.00	22.54	A
	ATOM	7878	CB	ASN	A1005	73.152	48.442	-13.333	1.00	24.42	A
	ATOM	7879	CG	ASN	A1005	74.150	49.147	-14.230	1.00	26.07	A
	ATOM	7880	OD1	ASN	A1005	74.346	50.361	-14.126	1.00	27.74	A
	ATOM	7881	ND2	ASN	A1005	74.790	48.392	-15.115	1.00	25.81	A
15	ATOM	7882	C	ASN	A1005	71.165	46.949	-13.167	1.00	22.28	A
	ATOM	7883	O	ASN	A1005	71.360	46.950	-11.952	1.00	22.03	A
	ATOM	7884	N	VAL	A1006	70.065	46.448	-13.714	1.00	22.19	A
	ATOM	7885	CA	VAL	A1006	69.022	45.869	-12.877	1.00	22.43	A
	ATOM	7886	CB	VAL	A1006	67.735	45.579	-13.690	1.00	21.96	A
20	ATOM	7887	CG1	VAL	A1006	68.026	44.599	-14.810	1.00	21.98	A
	ATOM	7888	CG2	VAL	A1006	66.649	45.035	-12.768	1.00	21.52	A
	ATOM	7889	C	VAL	A1006	69.537	44.580	-12.239	1.00	22.76	A
	ATOM	7890	O	VAL	A1006	70.095	43.718	-12.920	1.00	23.29	A
	ATOM	7891	N	ALA	A1007	69.361	44.465	-10.927	1.00	22.95	A
25	ATOM	7892	CA	ALA	A1007	69.813	43.295	-10.181	1.00	23.43	A
	ATOM	7893	CB	ALA	A1007	70.578	43.737	-8.935	1.00	23.72	A
	ATOM	7894	C	ALA	A1007	68.640	42.398	-9.793	1.00	23.92	A
	ATOM	7895	O	ALA	A1007	68.816	41.207	-9.533	1.00	23.84	A
	ATOM	7896	N	ARG	A1008	67.445	42.975	-9.736	1.00	23.57	A
30	ATOM	7897	CA	ARG	A1008	66.251	42.204	-9.413	1.00	24.00	A
	ATOM	7898	CB	ARG	A1008	66.236	41.782	-7.938	1.00	26.17	A
	ATOM	7899	CG	ARG	A1008	66.171	42.910	-6.933	1.00	29.81	A
	ATOM	7900	CD	ARG	A1008	66.045	42.358	-5.513	1.00	33.34	A
	ATOM	7901	NE	ARG	A1008	67.188	41.524	-5.140	1.00	35.30	A
35	ATOM	7902	CZ	ARG	A1008	68.436	41.969	-5.011	1.00	36.73	A
	ATOM	7903	NH1	ARG	A1008	68.718	43.249	-5.222	1.00	36.58	A
	ATOM	7904	NH2	ARG	A1008	69.409	41.129	-4.676	1.00	37.44	A
	ATOM	7905	C	ARG	A1008	64.983	42.973	-9.748	1.00	23.14	A
	ATOM	7906	O	ARG	A1008	64.981	44.206	-9.811	1.00	22.18	A
40	ATOM	7907	N	CYS	A1009	63.910	42.225	-9.979	1.00	22.25	A
	ATOM	7908	CA	CYS	A1009	62.617	42.797	-10.322	1.00	21.69	A
	ATOM	7909	C	CYS	A1009	61.572	42.099	-9.472	1.00	20.98	A
	ATOM	7910	O	CYS	A1009	61.501	40.868	-9.453	1.00	19.71	A
	ATOM	7911	CB	CYS	A1009	62.322	42.559	-11.799	1.00	23.19	A
45	ATOM	7912	SG	CYS	A1009	60.805	43.356	-12.416	1.00	25.61	A
	ATOM	7913	N	GLU	A1010	60.759	42.881	-8.771	1.00	19.93	A
	ATOM	7914	CA	GLU	A1010	59.743	42.307	-7.905	1.00	19.15	A
	ATOM	7915	CB	GLU	A1010	60.178	42.459	-6.444	1.00	20.68	A
	ATOM	7916	CG	GLU	A1010	61.488	41.748	-6.110	1.00	23.17	A
50	ATOM	7917	CD	GLU	A1010	62.113	42.241	-4.819	1.00	24.63	A
	ATOM	7918	OE1	GLU	A1010	62.533	43.419	-4.773	1.00	25.13	A
	ATOM	7919	OE2	GLU	A1010	62.183	41.452	-3.849	1.00	25.95	A
	ATOM	7920	C	GLU	A1010	58.372	42.943	-8.091	1.00	18.57	A
	ATOM	7921	O	GLU	A1010	58.258	44.148	-8.334	1.00	17.62	A
55	ATOM	7922	N	ARG	A1011	57.333	42.122	-7.995	1.00	17.73	A
	ATOM	7923	CA	ARG	A1011	55.970	42.623	-8.087	1.00	17.39	A
	ATOM	7924	CB	ARG	A1011	55.009	41.537	-8.571	1.00	19.53	A
	ATOM	7925	CG	ARG	A1011	53.590	42.048	-8.816	1.00	23.41	A
	ATOM	7926	CD	ARG	A1011	52.581	40.910	-8.808	1.00	27.12	A

5	ATOM	7927	NE	ARG	A1011	52.897	39.879	-9.790	1.00	31.70	A
	ATOM	7928	CZ	ARG	A1011	52.840	40.054	-11.107	1.00	33.53	A
	ATOM	7929	NH1	ARG	A1011	52.477	41.229	-11.607	1.00	35.13	A
	ATOM	7930	NH2	ARG	A1011	53.145	39.052	-11.925	1.00	34.20	A
	ATOM	7931	C	ARG	A1011	55.654	42.980	-6.637	1.00	16.18	A
10	ATOM	7932	O	ARG	A1011	55.992	42.226	-5.722	1.00	15.62	A
	ATOM	7933	N	THR	A1012	55.021	44.126	-6.423	1.00	14.81	A
	ATOM	7934	CA	THR	A1012	54.702	44.562	-5.071	1.00	13.76	A
	ATOM	7935	CB	THR	A1012	55.600	45.742	-4.635	1.00	14.36	A
	ATOM	7936	OG1	THR	A1012	55.252	46.904	-5.404	1.00	13.90	A
15	ATOM	7937	CG2	THR	A1012	57.072	45.422	-4.858	1.00	12.72	A
	ATOM	7938	C	THR	A1012	53.268	45.060	-4.984	1.00	13.68	A
	ATOM	7939	O	THR	A1012	52.568	45.170	-5.989	1.00	13.39	A
	ATOM	7940	N	THR	A1013	52.838	45.355	-3.764	1.00	12.69	A
	ATOM	7941	CA	THR	A1013	51.518	45.915	-3.552	1.00	12.46	A
20	ATOM	7942	CB	THR	A1013	51.225	46.036	-2.046	1.00	12.35	A
	ATOM	7943	OG1	THR	A1013	52.406	46.482	-1.367	1.00	11.61	A
	ATOM	7944	CG2	THR	A1013	50.807	44.676	-1.472	1.00	12.82	A
	ATOM	7945	C	THR	A1013	51.611	47.303	-4.203	1.00	12.06	A
	ATOM	7946	O	THR	A1013	52.716	47.809	-4.424	1.00	11.69	A
25	ATOM	7947	N	LEU	A1014	50.473	47.920	-4.509	1.00	12.08	A
	ATOM	7948	CA	LEU	A1014	50.479	49.228	-5.171	1.00	11.50	A
	ATOM	7949	CB	LEU	A1014	49.051	49.659	-5.504	1.00	11.09	A
	ATOM	7950	CG	LEU	A1014	48.261	48.712	-6.406	1.00	10.82	A
	ATOM	7951	CD1	LEU	A1014	46.957	49.394	-6.801	1.00	10.20	A
30	ATOM	7952	CD2	LEU	A1014	49.076	48.353	-7.647	1.00	10.52	A
	ATOM	7953	C	LEU	A1014	51.172	50.340	-4.404	1.00	11.34	A
	ATOM	7954	O	LEU	A1014	51.532	51.368	-4.984	1.00	11.68	A
	ATOM	7955	N	THR	A1015	51.360	50.133	-3.105	1.00	11.33	A
	ATOM	7956	CA	THR	A1015	52.019	51.106	-2.240	1.00	11.07	A
35	ATOM	7957	CB	THR	A1015	51.500	51.004	-0.800	1.00	11.10	A
	ATOM	7958	OG1	THR	A1015	51.640	49.648	-0.353	1.00	11.46	A
	ATOM	7959	CG2	THR	A1015	50.032	51.427	-0.714	1.00	10.67	A
	ATOM	7960	C	THR	A1015	53.528	50.866	-2.193	1.00	11.04	A
	ATOM	7961	O	THR	A1015	54.262	51.636	-1.563	1.00	11.09	A
40	ATOM	7962	N	PHE	A1016	53.972	49.794	-2.850	1.00	11.39	A
	ATOM	7963	CA	PHE	A1016	55.388	49.408	-2.897	1.00	12.27	A
	ATOM	7964	CB	PHE	A1016	56.271	50.604	-3.287	1.00	12.26	A
	ATOM	7965	CG	PHE	A1016	55.966	51.184	-4.639	1.00	11.88	A
	ATOM	7966	CD1	PHE	A1016	55.835	52.562	-4.797	1.00	12.08	A
45	ATOM	7967	CD2	PHE	A1016	55.823	50.366	-5.751	1.00	11.67	A
	ATOM	7968	CE1	PHE	A1016	55.561	53.115	-6.046	1.00	11.87	A
	ATOM	7969	CE2	PHE	A1016	55.549	50.912	-7.008	1.00	11.94	A
	ATOM	7970	CZ	PHE	A1016	55.417	52.286	-7.152	1.00	11.93	A
	ATOM	7971	C	PHE	A1016	55.881	48.879	-1.550	1.00	13.14	A
50	ATOM	7972	O	PHE	A1016	57.067	48.584	-1.394	1.00	13.12	A
	ATOM	7973	N	LEU	A1017	54.976	48.739	-0.585	1.00	13.12	A
	ATOM	7974	CA	LEU	A1017	55.369	48.299	0.751	1.00	13.58	A
	ATOM	7975	CB	LEU	A1017	54.374	48.855	1.779	1.00	12.73	A
	ATOM	7976	CG	LEU	A1017	54.334	50.394	1.786	1.00	12.87	A
55	ATOM	7977	CD1	LEU	A1017	53.323	50.893	2.805	1.00	12.49	A
	ATOM	7978	CD2	LEU	A1017	55.720	50.950	2.105	1.00	12.43	A
	ATOM	7979	C	LEU	A1017	55.595	46.808	0.988	1.00	14.53	A
	ATOM	7980	O	LEU	A1017	56.271	46.437	1.946	1.00	15.09	A
	ATOM	7981	N	GLN	A1018	55.042	45.949	0.137	1.00	15.38	A

5	ATOM	7982	CA	GLN	A1018	55.246	44.513	0.310	1.00	17.15	A
	ATOM	7983	CB	GLN	A1018	53.994	43.841	0.892	1.00	18.62	A
	ATOM	7984	CG	GLN	A1018	54.187	42.336	1.128	1.00	21.17	A
	ATOM	7985	CD	GLN	A1018	52.903	41.592	1.466	1.00	23.14	A
	ATOM	7986	OE1	GLN	A1018	52.917	40.373	1.668	1.00	25.29	A
10	ATOM	7987	NE2	GLN	A1018	51.789	42.313	1.522	1.00	22.60	A
	ATOM	7988	C	GLN	A1018	55.608	43.822	-1.003	1.00	17.88	A
	ATOM	7989	O	GLN	A1018	54.975	44.054	-2.033	1.00	16.65	A
	ATOM	7990	N	ASN	A1019	56.628	42.971	-0.963	1.00	18.66	A
	ATOM	7991	CA	ASN	A1019	57.036	42.238	-2.154	1.00	20.53	A
15	ATOM	7992	CB	ASN	A1019	58.498	41.798	-2.043	1.00	21.07	A
	ATOM	7993	CG	ASN	A1019	59.446	42.971	-1.879	1.00	22.32	A
	ATOM	7994	OD1	ASN	A1019	59.313	43.991	-2.561	1.00	22.36	A
	ATOM	7995	ND2	ASN	A1019	60.419	42.830	-0.982	1.00	22.05	A
	ATOM	7996	C	ASN	A1019	56.127	41.022	-2.285	1.00	21.52	A
20	ATOM	7997	O	ASN	A1019	55.948	40.267	-1.330	1.00	22.36	A
	ATOM	7998	N	LEU	A1020	55.548	40.838	-3.466	1.00	22.06	A
	ATOM	7999	CA	LEU	A1020	54.639	39.725	-3.705	1.00	23.36	A
	ATOM	8000	CB	LEU	A1020	53.345	40.233	-4.347	1.00	23.29	A
	ATOM	8001	CG	LEU	A1020	52.546	41.316	-3.618	1.00	23.35	A
25	ATOM	8002	CD1	LEU	A1020	51.427	41.815	-4.524	1.00	23.65	A
	ATOM	8003	CD2	LEU	A1020	51.983	40.763	-2.320	1.00	23.16	A
	ATOM	8004	C	LEU	A1020	55.238	38.648	-4.600	1.00	24.39	A
	ATOM	8005	O	LEU	A1020	54.876	37.474	-4.491	1.00	24.00	A
	ATOM	8006	N	GLU	A1021	56.145	39.044	-5.488	1.00	25.74	A
30	ATOM	8007	CA	GLU	A1021	56.759	38.093	-6.412	1.00	27.47	A
	ATOM	8008	CB	GLU	A1021	55.919	37.969	-7.684	1.00	28.95	A
	ATOM	8009	CG	GLU	A1021	54.604	37.243	-7.551	1.00	31.78	A
	ATOM	8010	CD	GLU	A1021	53.917	37.088	-8.897	1.00	33.30	A
	ATOM	8011	OE1	GLU	A1021	54.587	36.643	-9.856	1.00	33.68	A
35	ATOM	8012	OE2	GLU	A1021	52.712	37.408	-8.998	1.00	35.00	A
	ATOM	8013	C	GLU	A1021	58.174	38.440	-6.847	1.00	27.78	A
	ATOM	8014	O	GLU	A1021	58.484	39.599	-7.125	1.00	27.14	A
	ATOM	8015	N	HIS	A1022	59.024	37.420	-6.915	1.00	28.61	A
	ATOM	8016	CA	HIS	A1022	60.394	37.587	-7.377	1.00	29.85	A
40	ATOM	8017	CB	HIS	A1022	61.343	36.652	-6.624	1.00	31.37	A
	ATOM	8018	CG	HIS	A1022	62.782	36.825	-6.999	1.00	32.90	A
	ATOM	8019	CD2	HIS	A1022	63.692	35.944	-7.480	1.00	33.73	A
	ATOM	8020	ND1	HIS	A1022	63.438	38.034	-6.897	1.00	33.99	A
	ATOM	8021	CE1	HIS	A1022	64.688	37.890	-7.299	1.00	34.21	A
45	ATOM	8022	NE2	HIS	A1022	64.868	36.631	-7.659	1.00	34.14	A
	ATOM	8023	C	HIS	A1022	60.298	37.186	-8.847	1.00	29.97	A
	ATOM	8024	O	HIS	A1022	60.054	36.022	-9.169	1.00	29.65	A
	ATOM	8025	N	LEU	A1023	60.477	38.159	-9.732	1.00	29.90	A
	ATOM	8026	CA	LEU	A1023	60.354	37.929	-11.165	1.00	30.66	A
50	ATOM	8027	CB	LEU	A1023	59.901	39.225	-11.837	1.00	30.06	A
	ATOM	8028	CG	LEU	A1023	58.644	39.818	-11.194	1.00	29.45	A
	ATOM	8029	CD1	LEU	A1023	58.367	41.198	-11.757	1.00	30.04	A
	ATOM	8030	CD2	LEU	A1023	57.466	38.886	-11.432	1.00	29.81	A
	ATOM	8031	C	LEU	A1023	61.603	37.398	-11.854	1.00	31.31	A
55	ATOM	8032	O	LEU	A1023	62.656	38.034	-11.836	1.00	30.70	A
	ATOM	8033	N	ASP	A1024	61.470	36.229	-12.470	1.00	32.74	A
	ATOM	8034	CA	ASP	A1024	62.583	35.610	-13.179	1.00	33.94	A
	ATOM	8035	CB	ASP	A1024	62.202	34.203	-13.646	1.00	36.11	A
	ATOM	8036	CG	ASP	A1024	62.346	33.163	-12.547	1.00	38.17	A

5	ATOM	8037	OD1	ASP	A1024	62.074	31.974	-12.818	1.00	40.17	A
	ATOM	8038	OD2	ASP	A1024	62.737	33.531	-11.417	1.00	39.44	A
	ATOM	8039	C	ASP	A1024	63.001	36.454	-14.373	1.00	33.60	A
	ATOM	8040	O	ASP	A1024	62.179	37.150	-14.973	1.00	33.92	A
	ATOM	8041	N	GLY	A1025	64.284	36.393	-14.712	1.00	33.05	A
	ATOM	8042	CA	GLY	A1025	64.788	37.165	-15.832	1.00	32.63	A
	ATOM	8043	C	GLY	A1025	64.714	38.650	-15.547	1.00	32.42	A
	ATOM	8044	O	GLY	A1025	65.062	39.474	-16.394	1.00	32.65	A
10	ATOM	8045	N	MET	A1026	64.262	38.990	-14.344	1.00	31.91	A
	ATOM	8046	CA	MET	A1026	64.135	40.381	-13.932	1.00	31.78	A
	ATOM	8047	CB	MET	A1026	65.515	41.036	-13.860	1.00	32.40	A
	ATOM	8048	CG	MET	A1026	66.511	40.278	-13.002	1.00	33.57	A
15	ATOM	8049	SD	MET	A1026	68.098	41.116	-12.885	1.00	35.28	A
	ATOM	8050	CE	MET	A1026	68.895	40.532	-14.379	1.00	34.34	A
	ATOM	8051	C	MET	A1026	63.254	41.135	-14.920	1.00	31.27	A
	ATOM	8052	O	MET	A1026	63.496	42.302	-15.221	1.00	30.28	A
20	ATOM	8053	N	VAL	A1027	62.228	40.457	-15.422	1.00	30.91	A
	ATOM	8054	CA	VAL	A1027	61.316	41.068	-16.377	1.00	31.71	A
	ATOM	8055	CB	VAL	A1027	61.178	40.212	-17.650	1.00	31.61	A
	ATOM	8056	CG1	VAL	A1027	60.155	40.839	-18.589	1.00	32.07	A
	ATOM	8057	CG2	VAL	A1027	62.524	40.089	-18.340	1.00	31.52	A
	ATOM	8058	C	VAL	A1027	59.929	41.273	-15.788	1.00	31.69	A
25	ATOM	8059	O	VAL	A1027	59.295	40.327	-15.320	1.00	31.57	A
	ATOM	8060	N	ALA	A1028	59.463	42.516	-15.814	1.00	31.73	A
	ATOM	8061	CA	ALA	A1028	58.140	42.839	-15.300	1.00	32.08	A
	ATOM	8062	CB	ALA	A1028	58.114	44.265	-14.754	1.00	32.15	A
	ATOM	8063	C	ALA	A1028	57.145	42.694	-16.441	1.00	31.91	A
	ATOM	8064	O	ALA	A1028	57.116	43.514	-17.361	1.00	32.68	A
30	ATOM	8065	N	PRO	A1029	56.323	41.638	-16.405	1.00	31.39	A
	ATOM	8066	CD	PRO	A1029	56.223	40.615	-15.348	1.00	31.43	A
	ATOM	8067	CA	PRO	A1029	55.327	41.406	-17.454	1.00	31.08	A
	ATOM	8068	CB	PRO	A1029	54.819	40.005	-17.132	1.00	31.27	A
	ATOM	8069	CG	PRO	A1029	54.878	39.979	-15.639	1.00	31.48	A
	ATOM	8070	C	PRO	A1029	54.217	42.454	-17.398	1.00	30.48	A
35	ATOM	8071	O	PRO	A1029	53.919	42.995	-16.334	1.00	30.65	A
	ATOM	8072	N	GLU	A1030	53.612	42.743	-18.545	1.00	29.57	A
	ATOM	8073	CA	GLU	A1030	52.539	43.725	-18.595	1.00	28.77	A
	ATOM	8074	CB	GLU	A1030	52.224	44.094	-20.047	1.00	29.04	A
40	ATOM	8075	CG	GLU	A1030	53.447	44.504	-20.861	1.00	28.71	A
	ATOM	8076	CD	GLU	A1030	53.086	44.989	-22.253	1.00	28.71	A
	ATOM	8077	OE1	GLU	A1030	52.176	44.395	-22.867	1.00	29.16	A
	ATOM	8078	OE2	GLU	A1030	53.716	45.952	-22.738	1.00	27.83	A
45	ATOM	8079	C	GLU	A1030	51.300	43.153	-17.914	1.00	27.90	A
	ATOM	8080	O	GLU	A1030	51.190	41.939	-17.717	1.00	28.78	A
	ATOM	8081	N	VAL	A1031	50.366	44.026	-17.558	1.00	26.52	A
	ATOM	8082	CA	VAL	A1031	49.153	43.595	-16.883	1.00	24.32	A
	ATOM	8083	CB	VAL	A1031	48.745	44.606	-15.791	1.00	25.20	A
	ATOM	8084	CG1	VAL	A1031	49.850	44.709	-14.752	1.00	25.47	A
50	ATOM	8085	CG2	VAL	A1031	48.466	45.961	-16.408	1.00	24.31	A
	ATOM	8086	C	VAL	A1031	47.977	43.388	-17.826	1.00	22.92	A
	ATOM	8087	O	VAL	A1031	48.032	43.752	-18.998	1.00	22.93	A
	ATOM	8088	N	CYS	A1032	46.917	42.790	-17.295	1.00	21.33	A
55	ATOM	8089	CA	CYS	A1032	45.703	42.511	-18.051	1.00	20.05	A
	ATOM	8090	C	CYS	A1032	44.804	43.740	-18.132	1.00	18.10	A
	ATOM	8091	O	CYS	A1032	44.982	44.698	-17.381	1.00	17.38	A

5	ATOM	8092	CB	CYS	A1032	44.923	41.377	-17.380	1.00	20.75	A
	ATOM	8093	SG	CYS	A1032	45.684	39.722	-17.453	1.00	22.84	A
	ATOM	8094	N	PRO	A1033	43.820	43.727	-19.049	1.00	16.57	A
	ATOM	8095	CD	PRO	A1033	43.568	42.726	-20.104	1.00	16.27	A
	ATOM	8096	CA	PRO	A1033	42.906	44.865	-19.183	1.00	16.00	A
10	ATOM	8097	CB	PRO	A1033	41.941	44.404	-20.275	1.00	15.70	A
	ATOM	8098	CG	PRO	A1033	42.811	43.529	-21.138	1.00	16.00	A
	ATOM	8099	C	PRO	A1033	42.192	45.116	-17.853	1.00	15.35	A
	ATOM	8100	O	PRO	A1033	41.725	44.178	-17.206	1.00	14.40	A
	ATOM	8101	N	MET	A1034	42.119	46.385	-17.462	1.00	15.28	A
15	ATOM	8102	CA	MET	A1034	41.482	46.815	-16.221	1.00	15.94	A
	ATOM	8103	CB	MET	A1034	40.041	46.308	-16.143	1.00	15.40	A
	ATOM	8104	CG	MET	A1034	39.132	46.875	-17.223	1.00	16.32	A
	ATOM	8105	SD	MET	A1034	39.209	48.680	-17.336	1.00	16.96	A
	ATOM	8106	CE	MET	A1034	38.245	49.170	-15.883	1.00	17.76	A
20	ATOM	8107	C	MET	A1034	42.246	46.391	-14.972	1.00	16.88	A
	ATOM	8108	O	MET	A1034	41.726	46.484	-13.860	1.00	17.93	A
	ATOM	8109	N	GLU	A1035	43.477	45.930	-15.161	1.00	16.50	A
	ATOM	8110	CA	GLU	A1035	44.318	45.517	-14.044	1.00	17.13	A
	ATOM	8111	CB	GLU	A1035	44.989	44.166	-14.342	1.00	19.35	A
25	ATOM	8112	CG	GLU	A1035	46.198	43.864	-13.453	1.00	23.20	A
	ATOM	8113	CD	GLU	A1035	46.687	42.421	-13.550	1.00	25.99	A
	ATOM	8114	OE1	GLU	A1035	46.973	41.943	-14.674	1.00	26.11	A
	ATOM	8115	OE2	GLU	A1035	46.794	41.766	-12.488	1.00	28.07	A
	ATOM	8116	C	GLU	A1035	45.386	46.570	-13.765	1.00	16.00	A
30	ATOM	8117	O	GLU	A1035	45.777	47.328	-14.652	1.00	14.36	A
	ATOM	8118	N	THR	A1036	45.839	46.620	-12.518	1.00	15.22	A
	ATOM	8119	CA	THR	A1036	46.881	47.554	-12.116	1.00	14.15	A
	ATOM	8120	CB	THR	A1036	46.323	48.705	-11.253	1.00	13.96	A
	ATOM	8121	OG1	THR	A1036	45.285	49.383	-11.967	1.00	13.25	A
35	ATOM	8122	CG2	THR	A1036	47.427	49.701	-10.914	1.00	13.39	A
	ATOM	8123	C	THR	A1036	47.877	46.768	-11.279	1.00	13.98	A
	ATOM	8124	O	THR	A1036	47.487	46.031	-10.375	1.00	13.86	A
	ATOM	8125	N	ALA	A1037	49.159	46.912	-11.584	1.00	13.57	A
	ATOM	8126	CA	ALA	A1037	50.186	46.213	-10.832	1.00	14.07	A
40	ATOM	8127	CB	ALA	A1037	50.706	45.022	-11.626	1.00	14.55	A
	ATOM	8128	C	ALA	A1037	51.320	47.171	-10.526	1.00	14.09	A
	ATOM	8129	O	ALA	A1037	51.442	48.226	-11.149	1.00	14.87	A
	ATOM	8130	N	ALA	A1038	52.134	46.810	-9.544	1.00	13.48	A
	ATOM	8131	CA	ALA	A1038	53.268	47.633	-9.164	1.00	13.29	A
45	ATOM	8132	CB	ALA	A1038	53.066	48.207	-7.774	1.00	12.35	A
	ATOM	8133	C	ALA	A1038	54.512	46.766	-9.193	1.00	13.30	A
	ATOM	8134	O	ALA	A1038	54.468	45.590	-8.823	1.00	13.16	A
	ATOM	8135	N	TYR	A1039	55.612	47.347	-9.655	1.00	13.78	A
	ATOM	8136	CA	TYR	A1039	56.879	46.642	-9.722	1.00	14.56	A
50	ATOM	8137	CB	TYR	A1039	57.218	46.242	-11.160	1.00	14.67	A
	ATOM	8138	CG	TYR	A1039	56.188	45.367	-11.836	1.00	16.22	A
	ATOM	8139	CD1	TYR	A1039	55.247	45.914	-12.707	1.00	17.34	A
	ATOM	8140	CE1	TYR	A1039	54.306	45.111	-13.349	1.00	18.80	A
	ATOM	8141	CD2	TYR	A1039	56.162	43.990	-11.616	1.00	17.38	A
55	ATOM	8142	CE2	TYR	A1039	55.223	43.178	-12.253	1.00	18.40	A
	ATOM	8143	CZ	TYR	A1039	54.301	43.745	-13.118	1.00	19.04	A
	ATOM	8144	OH	TYR	A1039	53.377	42.949	-13.758	1.00	21.01	A
	ATOM	8145	C	TYR	A1039	57.979	47.546	-9.204	1.00	14.90	A
	ATOM	8146	O	TYR	A1039	57.925	48.767	-9.362	1.00	14.95	A

5	ATOM	8147	N	VAL	A1040	58.977	46.936	-8.580	1.00	15.13	A
	ATOM	8148	CA	VAL	A1040	60.115	47.674	-8.064	1.00	15.16	A
	ATOM	8149	CB	VAL	A1040	60.176	47.631	-6.521	1.00	15.50	A
	ATOM	8150	CG1	VAL	A1040	61.472	48.281	-6.029	1.00	15.65	A
	ATOM	8151	CG2	VAL	A1040	58.975	48.363	-5.937	1.00	14.36	A
10	ATOM	8152	C	VAL	A1040	61.357	47.010	-8.635	1.00	16.26	A
	ATOM	8153	O	VAL	A1040	61.538	45.795	-8.510	1.00	16.39	A
	ATOM	8154	N	SER	A1041	62.197	47.802	-9.291	1.00	16.31	A
	ATOM	8155	CA	SER	A1041	63.430	47.283	-9.860	1.00	17.09	A
	ATOM	8156	CB	SER	A1041	63.615	47.784	-11.299	1.00	16.94	A
15	ATOM	8157	OG	SER	A1041	63.690	49.198	-11.352	1.00	16.34	A
	ATOM	8158	C	SER	A1041	64.585	47.755	-8.987	1.00	17.15	A
	ATOM	8159	O	SER	A1041	64.618	48.910	-8.566	1.00	16.29	A
	ATOM	8160	N	SER	A1042	65.520	46.851	-8.706	1.00	17.84	A
	ATOM	8161	CA	SER	A1042	66.690	47.171	-7.890	1.00	18.46	A
20	ATOM	8162	CB	SER	A1042	66.896	46.108	-6.810	1.00	18.36	A
	ATOM	8163	OG	SER	A1042	65.761	46.045	-5.961	1.00	19.21	A
	ATOM	8164	C	SER	A1042	67.905	47.240	-8.802	1.00	18.79	A
	ATOM	8165	O	SER	A1042	68.056	46.419	-9.707	1.00	18.69	A
	ATOM	8166	N	HIS	A1043	68.766	48.223	-8.563	1.00	19.78	A
25	ATOM	8167	CA	HIS	A1043	69.946	48.420	-9.397	1.00	20.82	A
	ATOM	8168	CB	HIS	A1043	69.749	49.682	-10.234	1.00	19.47	A
	ATOM	8169	CG	HIS	A1043	68.444	49.704	-10.966	1.00	18.50	A
	ATOM	8170	CD2	HIS	A1043	67.209	50.092	-10.569	1.00	17.78	A
	ATOM	8171	ND1	HIS	A1043	68.292	49.189	-12.236	1.00	17.74	A
30	ATOM	8172	CE1	HIS	A1043	67.021	49.254	-12.587	1.00	17.63	A
	ATOM	8173	NE2	HIS	A1043	66.342	49.797	-11.593	1.00	18.16	A
	ATOM	8174	C	HIS	A1043	71.215	48.521	-8.565	1.00	22.62	A
	ATOM	8175	O	HIS	A1043	71.266	49.246	-7.573	1.00	22.60	A
	ATOM	8176	N	SER	A1044	72.240	47.790	-8.987	1.00	24.94	A
35	ATOM	8177	CA	SER	A1044	73.509	47.767	-8.275	1.00	27.40	A
	ATOM	8178	CB	SER	A1044	74.217	46.432	-8.532	1.00	28.13	A
	ATOM	8179	OG	SER	A1044	74.193	46.096	-9.911	1.00	29.65	A
	ATOM	8180	C	SER	A1044	74.434	48.923	-8.632	1.00	28.23	A
	ATOM	8181	O	SER	A1044	74.039	49.786	-9.448	1.00	28.56	A
40	ATOM	8182	OXT	SER	A1044	75.552	48.944	-8.077	1.00	29.86	A
	ATOM	8183	OH2	WAT	W 1	41.979	63.654	-7.156	1.00	8.05	W
	ATOM	8184	OH2	WAT	W 2	53.601	65.006	-19.784	1.00	11.44	W
	ATOM	8185	OH2	WAT	W 3	39.162	63.039	-19.188	1.00	9.94	W
	ATOM	8186	OH2	WAT	W 4	52.119	54.293	-4.860	1.00	9.88	W
45	ATOM	8187	OH2	WAT	W 5	56.136	53.559	-0.657	1.00	10.79	W
	ATOM	8188	OH2	WAT	W 6	31.383	50.075	-24.059	1.00	10.96	W
	ATOM	8189	OH2	WAT	W 7	49.858	48.630	1.284	1.00	12.86	W
	ATOM	8190	OH2	WAT	W 8	36.992	57.884	13.375	1.00	9.63	W
	ATOM	8191	OH2	WAT	W 9	26.755	69.172	-9.245	1.00	11.38	W
50	ATOM	8192	OH2	WAT	W 10	39.324	64.859	-14.901	1.00	12.67	W
	ATOM	8193	OH2	WAT	W 11	34.198	58.783	-8.711	1.00	11.93	W
	ATOM	8194	OH2	WAT	W 12	60.950	59.827	-8.309	1.00	11.38	W
	ATOM	8195	OH2	WAT	W 13	36.628	72.825	0.199	1.00	11.49	W
	ATOM	8196	OH2	WAT	W 14	31.708	47.175	-8.092	1.00	10.89	W
55	ATOM	8197	OH2	WAT	W 15	30.142	55.929	17.238	1.00	10.75	W
	ATOM	8198	OH2	WAT	W 16	26.117	49.830	-13.740	1.00	10.75	W
	ATOM	8199	OH2	WAT	W 17	37.632	52.396	-21.150	1.00	12.30	W
	ATOM	8200	OH2	WAT	W 18	33.010	62.954	0.153	1.00	10.82	W
	ATOM	8201	OH2	WAT	W 19	24.689	53.037	-11.753	1.00	11.02	W

5	ATOM	8202	OH2	WAT	W	20	63.105	61.515	-7.581	1.00	10.48	W
	ATOM	8203	OH2	WAT	W	21	41.285	59.153	13.532	1.00	12.85	W
	ATOM	8204	OH2	WAT	W	22	47.287	55.959	-15.370	1.00	14.81	W
	ATOM	8205	OH2	WAT	W	23	56.380	55.892	-2.106	1.00	8.54	W
	ATOM	8206	OH2	WAT	W	24	67.351	60.850	-5.664	1.00	14.58	W
10	ATOM	8207	OH2	WAT	W	25	26.262	48.939	-10.894	1.00	13.65	W
	ATOM	8208	OH2	WAT	W	26	65.620	60.396	-7.599	1.00	14.15	W
	ATOM	8209	OH2	WAT	W	27	32.469	60.318	-1.870	1.00	10.93	W
	ATOM	8210	OH2	WAT	W	28	20.127	54.851	16.211	1.00	17.01	W
	ATOM	8211	OH2	WAT	W	29	23.824	55.676	-23.371	1.00	12.86	W
15	ATOM	8212	OH2	WAT	W	30	39.335	57.550	14.798	1.00	11.81	W
	ATOM	8213	OH2	WAT	W	31	20.371	58.963	-21.881	1.00	12.24	W
	ATOM	8214	OH2	WAT	W	32	28.075	61.166	19.435	1.00	13.45	W
	ATOM	8215	OH2	WAT	W	33	34.058	56.487	-26.256	1.00	11.49	W
	ATOM	8216	OH2	WAT	W	34	26.341	40.112	7.993	1.00	15.36	W
20	ATOM	8217	OH2	WAT	W	35	63.796	50.324	-14.022	1.00	12.67	W
	ATOM	8218	OH2	WAT	W	36	37.486	57.200	1.752	1.00	12.39	W
	ATOM	8219	OH2	WAT	W	37	24.088	42.135	6.847	1.00	14.18	W
	ATOM	8220	OH2	WAT	W	38	31.966	65.565	18.975	1.00	15.73	W
	ATOM	8221	OH2	WAT	W	39	51.492	56.797	-5.607	1.00	8.86	W
25	ATOM	8222	OH2	WAT	W	40	20.056	56.197	7.115	1.00	13.43	W
	ATOM	8223	OH2	WAT	W	41	28.261	43.988	13.133	1.00	11.93	W
	ATOM	8224	OH2	WAT	W	42	30.237	58.632	-11.794	1.00	11.17	W
	ATOM	8225	OH2	WAT	W	43	64.887	59.396	-3.618	1.00	16.12	W
	ATOM	8226	OH2	WAT	W	44	46.340	67.858	-15.581	1.00	15.57	W
30	ATOM	8227	OH2	WAT	W	45	60.698	58.457	-2.874	1.00	13.59	W
	ATOM	8228	OH2	WAT	W	46	60.499	62.267	-1.276	1.00	14.53	W
	ATOM	8229	OH2	WAT	W	47	53.593	60.068	-9.458	1.00	12.82	W
	ATOM	8230	OH2	WAT	W	48	18.566	51.203	-12.450	1.00	15.00	W
	ATOM	8231	OH2	WAT	W	49	28.876	42.922	-11.951	1.00	16.11	W
35	ATOM	8232	OH2	WAT	W	50	34.497	79.288	-9.194	1.00	12.70	W
	ATOM	8233	OH2	WAT	W	51	21.521	58.048	-7.816	1.00	13.55	W
	ATOM	8234	OH2	WAT	W	52	36.974	72.026	-4.632	1.00	11.46	W
	ATOM	8235	OH2	WAT	W	53	55.633	59.600	-11.527	1.00	12.06	W
	ATOM	8236	OH2	WAT	W	54	36.685	44.992	-5.521	1.00	12.94	W
40	ATOM	8237	OH2	WAT	W	55	51.282	53.464	-24.055	1.00	15.04	W
	ATOM	8238	OH2	WAT	W	56	35.178	50.782	-17.540	1.00	18.13	W
	ATOM	8239	OH2	WAT	W	57	60.506	54.958	-0.396	1.00	15.58	W
	ATOM	8240	OH2	WAT	W	58	42.909	56.986	6.187	1.00	11.90	W
	ATOM	8241	OH2	WAT	W	59	47.858	59.457	-25.679	1.00	15.94	W
45	ATOM	8242	OH2	WAT	W	60	37.848	73.645	-2.364	1.00	13.96	W
	ATOM	8243	OH2	WAT	W	61	19.391	55.464	11.518	1.00	14.93	W
	ATOM	8244	OH2	WAT	W	62	25.911	39.813	5.195	1.00	11.56	W
	ATOM	8245	OH2	WAT	W	63	23.258	54.236	-3.647	1.00	15.92	W
	ATOM	8246	OH2	WAT	W	64	34.294	52.614	-1.083	1.00	12.31	W
50	ATOM	8247	OH2	WAT	W	65	50.997	44.377	-7.959	1.00	13.40	W
	ATOM	8248	OH2	WAT	W	66	37.875	59.168	11.062	1.00	12.70	W
	ATOM	8249	OH2	WAT	W	67	16.619	49.176	24.039	1.00	17.09	W
	ATOM	8250	OH2	WAT	W	68	19.392	53.623	8.170	1.00	14.32	W
	ATOM	8251	OH2	WAT	W	69	11.769	51.733	14.377	1.00	15.40	W
55	ATOM	8252	OH2	WAT	W	70	17.139	56.383	10.249	1.00	14.93	W
	ATOM	8253	OH2	WAT	W	71	67.983	65.707	-3.476	1.00	14.66	W
	ATOM	8254	OH2	WAT	W	72	22.822	53.249	-24.440	1.00	18.17	W
	ATOM	8255	OH2	WAT	W	73	52.061	50.772	6.360	1.00	11.54	W
	ATOM	8256	OH2	WAT	W	74	17.596	52.950	6.333	1.00	13.94	W

5	ATOM	8257	OH2	WAT	W	75	68.801	58.401	-5.067	1.00	15.47	W
	ATOM	8258	OH2	WAT	W	76	33.510	48.227	-10.155	1.00	10.97	W
	ATOM	8259	OH2	WAT	W	77	26.793	41.647	-13.173	1.00	13.87	W
	ATOM	8260	OH2	WAT	W	78	26.744	61.077	-3.285	1.00	11.60	W
	ATOM	8261	OH2	WAT	W	79	49.480	62.451	-8.644	1.00	9.33	W
10	ATOM	8262	OH2	WAT	W	80	41.021	52.499	-16.991	1.00	13.50	W
	ATOM	8263	OH2	WAT	W	81	31.434	76.936	-6.264	1.00	15.03	W
	ATOM	8264	OH2	WAT	W	82	43.379	68.423	-24.915	1.00	14.16	W
	ATOM	8265	OH2	WAT	W	83	32.764	81.302	-11.715	1.00	13.97	W
	ATOM	8266	OH2	WAT	W	84	20.523	66.419	-19.639	1.00	13.09	W
15	ATOM	8267	OH2	WAT	W	85	40.401	62.934	6.179	1.00	12.03	W
	ATOM	8268	OH2	WAT	W	86	42.119	47.453	-24.559	1.00	17.53	W
	ATOM	8269	OH2	WAT	W	87	44.524	42.002	-0.591	1.00	19.33	W
	ATOM	8270	OH2	WAT	W	88	38.626	55.309	-31.696	1.00	13.53	W
	ATOM	8271	OH2	WAT	W	89	22.307	54.475	-11.945	1.00	12.50	W
20	ATOM	8272	OH2	WAT	W	90	48.303	89.462	-30.628	1.00	20.34	W
	ATOM	8273	OH2	WAT	W	91	36.707	51.821	3.758	1.00	11.30	W
	ATOM	8274	OH2	WAT	W	92	38.733	62.443	8.416	1.00	13.40	W
	ATOM	8275	OH2	WAT	W	93	47.443	46.140	3.623	1.00	9.98	W
	ATOM	8276	OH2	WAT	W	94	33.576	57.296	-35.875	1.00	16.19	W
25	ATOM	8277	OH2	WAT	W	95	32.312	77.752	-29.560	1.00	14.95	W
	ATOM	8278	OH2	WAT	W	96	39.250	39.226	17.190	1.00	18.72	W
	ATOM	8279	OH2	WAT	W	97	35.930	53.330	1.320	1.00	9.48	W
	ATOM	8280	OH2	WAT	W	98	14.447	60.154	5.058	1.00	17.17	W
	ATOM	8281	OH2	WAT	W	99	21.655	57.292	5.020	1.00	11.98	W
30	ATOM	8282	OH2	WAT	W	100	43.040	48.234	11.162	1.00	12.84	W
	ATOM	8283	OH2	WAT	W	101	26.080	73.018	5.559	1.00	14.30	W
	ATOM	8284	OH2	WAT	W	102	27.431	48.649	-21.557	1.00	22.43	W
	ATOM	8285	OH2	WAT	W	103	33.294	78.869	-4.985	1.00	13.70	W
	ATOM	8286	OH2	WAT	W	104	49.992	59.656	-11.582	1.00	9.75	W
35	ATOM	8287	OH2	WAT	W	105	25.582	51.390	-9.530	1.00	14.63	W
	ATOM	8288	OH2	WAT	W	106	40.201	56.515	5.849	1.00	11.03	W
	ATOM	8289	OH2	WAT	W	107	14.015	59.894	-3.431	1.00	15.09	W
	ATOM	8290	OH2	WAT	W	108	19.701	53.654	-11.750	1.00	14.70	W
	ATOM	8291	OH2	WAT	W	109	26.513	63.805	17.151	1.00	21.71	W
40	ATOM	8292	OH2	WAT	W	110	19.778	57.568	-11.786	1.00	15.33	W
	ATOM	8293	OH2	WAT	W	111	47.187	48.533	11.420	1.00	22.52	W
	ATOM	8294	OH2	WAT	W	112	67.813	81.789	-25.634	1.00	15.49	W
	ATOM	8295	OH2	WAT	W	113	22.910	51.833	-8.728	1.00	17.22	W
	ATOM	8296	OH2	WAT	W	114	46.597	70.553	-36.714	1.00	16.13	W
45	ATOM	8297	OH2	WAT	W	115	20.543	57.579	-5.285	1.00	11.86	W
	ATOM	8298	OH2	WAT	W	116	18.154	60.637	24.428	1.00	23.17	W
	ATOM	8299	OH2	WAT	W	117	41.280	68.626	-32.512	1.00	16.76	W
	ATOM	8300	OH2	WAT	W	118	38.328	40.122	1.665	1.00	12.98	W
	ATOM	8301	OH2	WAT	W	119	23.855	58.244	6.312	1.00	12.38	W
50	ATOM	8302	OH2	WAT	W	120	18.101	59.927	-20.092	1.00	23.40	W
	ATOM	8303	OH2	WAT	W	121	41.276	77.738	-14.102	1.00	15.70	W
	ATOM	8304	OH2	WAT	W	122	52.842	59.201	-1.699	1.00	21.35	W
	ATOM	8305	OH2	WAT	W	123	47.942	49.607	13.775	1.00	12.65	W
	ATOM	8306	OH2	WAT	W	124	35.232	43.720	28.641	1.00	15.37	W
55	ATOM	8307	OH2	WAT	W	125	59.499	60.738	-6.298	1.00	12.21	W
	ATOM	8308	OH2	WAT	W	126	53.661	72.740	-19.148	1.00	13.77	W
	ATOM	8309	OH2	WAT	W	127	39.796	54.103	-20.838	1.00	20.47	W
	ATOM	8310	OH2	WAT	W	128	33.113	36.777	-4.404	1.00	19.85	W
	ATOM	8311	OH2	WAT	W	129	14.324	64.079	-16.361	1.00	16.40	W

5	ATOM	8312	OH2	WAT	W	130	47.511	43.081	-2.434	1.00	16.15	W
	ATOM	8313	OH2	WAT	W	131	46.904	56.002	-25.485	1.00	17.18	W
	ATOM	8314	OH2	WAT	W	132	32.138	58.794	-28.468	1.00	18.35	W
	ATOM	8315	OH2	WAT	W	133	49.264	50.050	28.230	1.00	22.47	W
	ATOM	8316	OH2	WAT	W	134	26.292	37.411	29.332	1.00	24.20	W
	ATOM	8317	OH2	WAT	W	135	51.883	46.667	1.206	1.00	12.72	W
	ATOM	8318	OH2	WAT	W	136	41.713	58.870	-16.022	1.00	14.58	W
10	ATOM	8319	OH2	WAT	W	137	13.817	54.250	4.446	1.00	20.80	W
	ATOM	8320	OH2	WAT	W	138	67.797	79.183	-25.331	1.00	15.35	W
	ATOM	8321	OH2	WAT	W	139	42.168	75.429	-16.021	1.00	16.13	W
	ATOM	8322	OH2	WAT	W	140	23.119	56.194	30.804	1.00	18.52	W
	ATOM	8323	OH2	WAT	W	141	56.988	61.152	1.554	1.00	17.70	W
15	ATOM	8324	OH2	WAT	W	142	20.075	74.547	-6.879	1.00	14.89	W
	ATOM	8325	OH2	WAT	W	143	13.378	53.661	1.806	1.00	17.64	W
	ATOM	8326	OH2	WAT	W	144	34.280	34.507	16.087	1.00	20.88	W
	ATOM	8327	OH2	WAT	W	145	33.932	64.705	-32.236	1.00	16.75	W
	ATOM	8328	OH2	WAT	W	146	14.061	49.293	15.438	1.00	16.25	W
20	ATOM	8329	OH2	WAT	W	147	30.384	35.313	-12.407	1.00	20.29	W
	ATOM	8330	OH2	WAT	W	148	18.403	55.006	14.038	1.00	14.99	W
	ATOM	8331	OH2	WAT	W	149	15.636	60.472	15.465	1.00	21.47	W
	ATOM	8332	OH2	WAT	W	150	16.791	74.875	-3.047	1.00	20.80	W
	ATOM	8333	OH2	WAT	W	151	56.518	46.319	-17.443	1.00	19.10	W
25	ATOM	8334	OH2	WAT	W	152	45.628	60.100	-18.241	1.00	16.63	W
	ATOM	8335	OH2	WAT	W	153	28.171	84.777	-35.426	1.00	18.35	W
	ATOM	8336	OH2	WAT	W	154	73.029	65.246	-7.720	1.00	18.19	W
	ATOM	8337	OH2	WAT	W	155	73.770	66.211	-17.640	1.00	18.74	W
	ATOM	8338	OH2	WAT	W	156	59.259	50.047	-0.667	1.00	17.63	W
30	ATOM	8339	OH2	WAT	W	157	23.044	78.525	-24.838	1.00	20.25	W
	ATOM	8340	OH2	WAT	W	158	14.298	54.500	-16.068	1.00	18.13	W
	ATOM	8341	OH2	WAT	W	159	43.558	73.338	5.809	1.00	12.80	W
	ATOM	8342	OH2	WAT	W	160	11.895	55.194	-12.525	1.00	18.10	W
	ATOM	8343	OH2	WAT	W	161	63.550	44.738	-6.929	1.00	16.10	W
35	ATOM	8344	OH2	WAT	W	162	24.753	51.132	-24.121	1.00	17.61	W
	ATOM	8345	OH2	WAT	W	163	35.486	45.424	-27.380	1.00	17.74	W
	ATOM	8346	OH2	WAT	W	164	28.688	49.888	-24.414	1.00	21.74	W
	ATOM	8347	OH2	WAT	W	165	54.813	81.192	-23.474	1.00	17.16	W
	ATOM	8348	OH2	WAT	W	166	23.604	63.804	7.820	1.00	20.53	W
40	ATOM	8349	OH2	WAT	W	167	49.744	57.760	-7.648	1.00	12.03	W
	ATOM	8350	OH2	WAT	W	168	46.061	71.148	0.115	1.00	20.51	W
	ATOM	8351	OH2	WAT	W	169	24.323	55.822	-1.895	1.00	14.21	W
	ATOM	8352	OH2	WAT	W	170	28.647	41.366	-21.778	1.00	15.50	W
	ATOM	8353	OH2	WAT	W	171	37.052	45.730	27.466	1.00	15.23	W
45	ATOM	8354	OH2	WAT	W	172	41.487	41.345	-17.622	1.00	17.68	W
	ATOM	8355	OH2	WAT	W	173	40.305	62.726	-31.970	1.00	17.43	W
	ATOM	8356	OH2	WAT	W	174	49.313	59.380	-28.687	1.00	16.29	W
	ATOM	8357	OH2	WAT	W	175	64.386	39.376	-10.440	1.00	28.13	W
	ATOM	8358	OH2	WAT	W	176	19.168	72.621	2.908	1.00	21.55	W
50	ATOM	8359	OH2	WAT	W	177	17.064	70.461	-16.407	1.00	15.86	W
	ATOM	8360	OH2	WAT	W	178	9.518	52.618	16.850	1.00	29.64	W
	ATOM	8361	OH2	WAT	W	179	53.879	71.479	-36.735	1.00	13.71	W
	ATOM	8362	OH2	WAT	W	180	50.889	71.054	-23.486	1.00	16.09	W
	ATOM	8363	OH2	WAT	W	181	49.384	44.309	4.445	1.00	15.10	W
55	ATOM	8364	OH2	WAT	W	182	59.367	68.444	2.370	1.00	21.67	W
	ATOM	8365	OH2	WAT	W	183	25.439	53.900	11.086	1.00	15.64	W
	ATOM	8366	OH2	WAT	W	184	69.086	61.568	-2.411	1.00	16.23	W

5	ATOM	8367	OH2	WAT	W	185	58.341	77.603	-38.440	1.00	18.02	W
	ATOM	8368	OH2	WAT	W	186	44.390	46.220	9.936	1.00	17.37	W
	ATOM	8369	OH2	WAT	W	187	46.547	57.491	-18.779	1.00	13.56	W
	ATOM	8370	OH2	WAT	W	188	33.493	83.726	-10.384	1.00	16.90	W
	ATOM	8371	OH2	WAT	W	189	47.052	68.688	-30.395	1.00	20.70	W
10	ATOM	8372	OH2	WAT	W	190	44.386	56.163	-15.436	1.00	17.54	W
	ATOM	8373	OH2	WAT	W	191	13.141	67.021	-4.770	1.00	16.21	W
	ATOM	8374	OH2	WAT	W	192	24.512	39.271	-11.474	1.00	19.84	W
	ATOM	8375	OH2	WAT	W	193	41.591	61.284	-29.731	1.00	17.96	W
	ATOM	8376	OH2	WAT	W	194	27.187	41.479	13.299	1.00	18.70	W
15	ATOM	8377	OH2	WAT	W	195	42.003	88.025	-40.833	1.00	20.34	W
	ATOM	8378	OH2	WAT	W	196	69.850	70.102	-12.637	1.00	18.95	W
	ATOM	8379	OH2	WAT	W	197	64.133	78.095	-35.174	1.00	15.70	W
	ATOM	8380	OH2	WAT	W	198	20.411	65.476	7.641	1.00	22.81	W
	ATOM	8381	OH2	WAT	W	199	11.382	61.518	-18.592	1.00	24.08	W
20	ATOM	8382	OH2	WAT	W	200	24.515	70.804	-8.824	1.00	12.95	W
	ATOM	8383	OH2	WAT	W	201	25.028	40.143	14.192	1.00	15.50	W
	ATOM	8384	OH2	WAT	W	202	22.728	63.442	-33.182	1.00	19.12	W
	ATOM	8385	OH2	WAT	W	203	41.675	43.431	7.944	1.00	16.39	W
	ATOM	8386	OH2	WAT	W	204	21.035	51.916	47.273	1.00	21.06	W
25	ATOM	8387	OH2	WAT	W	205	41.323	50.434	33.218	1.00	21.10	W
	ATOM	8388	OH2	WAT	W	206	45.961	52.944	-19.253	1.00	20.91	W
	ATOM	8389	OH2	WAT	W	207	51.427	76.534	-40.959	1.00	29.19	W
	ATOM	8390	OH2	WAT	W	208	25.701	86.532	-31.930	1.00	16.19	W
	ATOM	8391	OH2	WAT	W	209	12.460	56.457	5.406	1.00	18.11	W
30	ATOM	8392	OH2	WAT	W	210	22.528	56.988	-34.123	1.00	19.06	W
	ATOM	8393	OH2	WAT	W	211	43.856	72.929	-42.044	1.00	28.46	W
	ATOM	8394	OH2	WAT	W	212	44.594	58.887	-16.004	1.00	14.67	W
	ATOM	8395	OH2	WAT	W	213	31.327	81.894	0.496	1.00	18.34	W
	ATOM	8396	OH2	WAT	W	214	51.990	56.524	-30.250	1.00	22.59	W
35	ATOM	8397	OH2	WAT	W	215	17.291	70.212	-23.398	1.00	26.14	W
	ATOM	8398	OH2	WAT	W	216	37.674	47.140	29.767	1.00	18.64	W
	ATOM	8399	OH2	WAT	W	217	49.763	55.189	-28.946	1.00	20.75	W
	ATOM	8400	OH2	WAT	W	218	36.224	79.442	-5.010	1.00	20.29	W
	ATOM	8401	OH2	WAT	W	219	62.253	62.767	25.731	1.00	18.51	W
40	ATOM	8402	OH2	WAT	W	220	11.367	53.252	6.826	1.00	16.35	W
	ATOM	8403	OH2	WAT	W	221	13.918	60.924	-22.492	1.00	17.57	W
	ATOM	8404	OH2	WAT	W	222	50.826	62.132	26.293	1.00	18.66	W
	ATOM	8405	OH2	WAT	W	223	68.567	79.132	-18.104	1.00	23.07	W
	ATOM	8406	OH2	WAT	W	224	84.246	68.535	-17.436	1.00	18.57	W
45	ATOM	8407	OH2	WAT	W	225	21.706	40.481	-8.839	1.00	39.04	W
	ATOM	8408	OH2	WAT	W	226	52.774	69.943	18.294	1.00	29.32	W
	ATOM	8409	OH2	WAT	W	227	42.710	53.366	35.547	1.00	23.23	W
	ATOM	8410	OH2	WAT	W	228	70.573	52.241	-12.697	1.00	18.76	W
	ATOM	8411	OH2	WAT	W	229	34.677	70.519	13.163	1.00	15.62	W
50	ATOM	8412	OH2	WAT	W	230	27.183	46.437	13.610	1.00	17.02	W
	ATOM	8413	OH2	WAT	W	231	14.461	49.789	19.876	1.00	21.18	W
	ATOM	8414	OH2	WAT	W	232	49.677	73.603	-21.812	1.00	20.74	W
	ATOM	8415	OH2	WAT	W	233	48.689	44.397	-6.207	1.00	23.27	W
	ATOM	8416	OH2	WAT	W	234	61.411	77.066	-39.605	1.00	20.10	W
55	ATOM	8417	OH2	WAT	W	235	22.867	78.771	-30.351	1.00	27.37	W
	ATOM	8418	OH2	WAT	W	236	43.608	88.812	-38.512	1.00	22.55	W
	ATOM	8419	OH2	WAT	W	237	35.757	77.729	-7.317	1.00	14.57	W
	ATOM	8420	OH2	WAT	W	238	24.900	68.466	21.787	1.00	17.96	W
	ATOM	8421	OH2	WAT	W	239	68.063	49.283	-1.100	1.00	22.72	W

5	ATOM	8422	OH2	WAT	W	240	54.299	48.026	15.591	1.00	25.88	W
	ATOM	8423	OH2	WAT	W	241	55.049	50.600	16.690	1.00	28.67	W
	ATOM	8424	OH2	WAT	W	242	39.361	48.842	-32.770	1.00	25.18	W
	ATOM	8425	OH2	WAT	W	243	22.699	45.380	-13.467	1.00	21.72	W
	ATOM	8426	OH2	WAT	W	244	67.040	55.442	0.924	1.00	15.31	W
10	ATOM	8427	OH2	WAT	W	245	47.931	44.056	-8.657	1.00	22.96	W
	ATOM	8428	OH2	WAT	W	246	26.926	87.957	-23.673	1.00	20.73	W
	ATOM	8429	OH2	WAT	W	247	18.939	48.658	37.726	1.00	21.79	W
	ATOM	8430	OH2	WAT	W	248	83.613	67.735	-22.892	1.00	25.89	W
	ATOM	8431	OH2	WAT	W	249	43.080	59.956	-19.011	1.00	22.21	W
15	ATOM	8432	OH2	WAT	W	250	47.447	79.280	-40.381	1.00	21.91	W
	ATOM	8433	OH2	WAT	W	251	8.610	57.762	-6.870	1.00	27.88	W
	ATOM	8434	OH2	WAT	W	252	54.864	90.452	-23.484	1.00	28.07	W
	ATOM	8435	OH2	WAT	W	253	27.829	36.704	-19.683	1.00	24.79	W
	ATOM	8436	OH2	WAT	W	254	72.041	58.809	-11.211	1.00	23.82	W
20	ATOM	8437	OH2	WAT	W	255	34.317	67.941	12.414	1.00	12.73	W
	ATOM	8438	OH2	WAT	W	256	11.689	59.501	-4.979	1.00	21.37	W
	ATOM	8439	OH2	WAT	W	257	23.547	46.199	-15.862	1.00	24.69	W
	ATOM	8440	OH2	WAT	W	258	50.148	70.938	-17.614	1.00	19.04	W
	ATOM	8441	OH2	WAT	W	259	45.026	90.336	-25.359	1.00	23.05	W
25	ATOM	8442	OH2	WAT	W	260	16.051	72.410	-19.141	1.00	18.99	W
	ATOM	8443	OH2	WAT	W	261	20.057	52.682	-24.371	1.00	18.41	W
	ATOM	8444	OH2	WAT	W	262	59.525	76.638	-8.915	1.00	20.35	W
	ATOM	8445	OH2	WAT	W	263	67.003	60.112	-27.213	1.00	21.44	W
	ATOM	8446	OH2	WAT	W	264	38.567	51.573	-29.906	1.00	19.02	W
30	ATOM	8447	OH2	WAT	W	265	40.324	83.008	-10.715	1.00	18.13	W
	ATOM	8448	OH2	WAT	W	266	42.243	48.804	31.283	1.00	18.64	W
	ATOM	8449	OH2	WAT	W	267	24.084	53.092	-6.116	1.00	17.16	W
	ATOM	8450	OH2	WAT	W	268	53.144	47.239	-24.933	1.00	20.15	W
	ATOM	8451	OH2	WAT	W	269	32.591	89.326	-43.014	1.00	25.83	W
35	ATOM	8452	OH2	WAT	W	270	35.918	36.131	-4.652	1.00	19.94	W
	ATOM	8453	OH2	WAT	W	271	70.097	83.236	-29.819	1.00	25.99	W
	ATOM	8454	OH2	WAT	W	272	49.672	82.609	-43.732	1.00	22.21	W
	ATOM	8455	OH2	WAT	W	273	68.303	79.781	-34.802	1.00	25.72	W
	ATOM	8456	OH2	WAT	W	274	29.275	46.925	37.053	1.00	24.15	W
40	ATOM	8457	OH2	WAT	W	275	18.487	70.059	4.190	1.00	14.14	W
	ATOM	8458	OH2	WAT	W	276	14.136	68.374	-7.960	1.00	20.02	W
	ATOM	8459	OH2	WAT	W	277	50.303	72.617	9.138	1.00	33.87	W
	ATOM	8460	OH2	WAT	W	278	39.685	75.893	-40.177	1.00	20.18	W
	ATOM	8461	OH2	WAT	W	279	28.798	65.257	19.691	1.00	15.58	W
45	ATOM	8462	OH2	WAT	W	280	11.686	58.802	7.875	1.00	22.13	W
	ATOM	8463	OH2	WAT	W	281	52.678	79.065	-17.312	1.00	23.55	W
	ATOM	8464	OH2	WAT	W	282	18.551	65.160	-27.061	1.00	24.87	W
	ATOM	8465	OH2	WAT	W	283	44.655	79.479	-33.163	1.00	23.28	W
	ATOM	8466	OH2	WAT	W	284	36.141	81.260	6.293	1.00	20.52	W
50	ATOM	8467	OH2	WAT	W	285	16.704	60.781	-28.283	1.00	26.21	W
	ATOM	8468	OH2	WAT	W	286	29.546	87.479	-17.987	1.00	29.41	W
	ATOM	8469	OH2	WAT	W	287	8.873	55.123	-6.136	1.00	25.16	W
	ATOM	8470	OH2	WAT	W	288	46.657	61.790	-25.940	1.00	21.32	W
	ATOM	8471	OH2	WAT	W	289	42.933	82.357	-10.072	1.00	30.75	W
55	ATOM	8472	OH2	WAT	W	290	10.304	50.828	18.854	1.00	22.62	W
	ATOM	8473	OH2	WAT	W	291	12.803	42.588	12.658	1.00	17.50	W
	ATOM	8474	OH2	WAT	W	292	35.953	45.284	30.852	1.00	21.96	W
	ATOM	8475	OH2	WAT	W	293	15.695	75.427	-11.773	1.00	28.82	W
	ATOM	8476	OH2	WAT	W	294	25.241	46.933	-20.851	1.00	26.50	W

5	ATOM	8477	OH2	WAT	W	295	56.985	65.097	24.144	1.00	25.11	W
	ATOM	8478	OH2	WAT	W	296	38.666	94.400	-42.035	1.00	24.62	W
	ATOM	8479	OH2	WAT	W	297	34.710	59.743	-34.933	1.00	22.62	W
	ATOM	8480	OH2	WAT	W	298	32.944	41.331	-17.505	1.00	26.13	W
	ATOM	8481	OH2	WAT	W	299	20.657	42.768	-7.509	1.00	21.95	W
10	ATOM	8482	OH2	WAT	W	300	19.155	76.985	4.910	1.00	38.11	W
	ATOM	8483	OH2	WAT	W	301	43.373	80.840	4.965	1.00	24.73	W
	ATOM	8484	OH2	WAT	W	302	32.881	85.482	-5.464	1.00	21.36	W
	ATOM	8485	OH2	WAT	W	303	31.104	33.601	2.777	1.00	24.21	W
	ATOM	8486	OH2	WAT	W	304	21.396	78.741	-1.313	1.00	21.96	W
15	ATOM	8487	OH2	WAT	W	305	55.254	59.216	4.036	1.00	21.45	W
	ATOM	8488	OH2	WAT	W	306	13.447	62.535	-19.982	1.00	20.72	W
	ATOM	8489	OH2	WAT	W	307	16.955	51.042	-19.284	1.00	29.66	W
	ATOM	8490	OH2	WAT	W	308	14.307	62.996	-12.146	1.00	18.26	W
	ATOM	8491	OH2	WAT	W	309	53.317	86.994	-21.280	1.00	26.84	W
20	ATOM	8492	OH2	WAT	W	310	70.858	49.588	-0.140	1.00	24.53	W
	ATOM	8493	OH2	WAT	W	311	57.961	42.561	1.493	1.00	26.85	W
	ATOM	8494	OH2	WAT	W	312	74.694	76.842	-14.248	1.00	29.16	W
	ATOM	8495	OH2	WAT	W	313	24.860	83.244	-16.897	1.00	20.51	W
	ATOM	8496	OH2	WAT	W	314	56.992	67.918	-35.378	1.00	23.70	W
25	ATOM	8497	OH2	WAT	W	315	48.877	50.823	-29.576	1.00	27.22	W
	ATOM	8498	OH2	WAT	W	316	66.517	71.811	-6.772	1.00	20.99	W
	ATOM	8499	OH2	WAT	W	317	28.748	93.976	-38.371	1.00	26.19	W
	ATOM	8500	OH2	WAT	W	318	32.645	64.843	-10.052	1.00	16.14	W
	ATOM	8501	OH2	WAT	W	319	13.378	51.128	-1.741	1.00	26.12	W
30	ATOM	8502	OH2	WAT	W	320	39.215	49.398	30.134	1.00	22.80	W
	ATOM	8503	OH2	WAT	W	321	67.798	58.798	-23.988	1.00	20.43	W
	ATOM	8504	OH2	WAT	W	322	20.725	59.171	-34.517	1.00	19.35	W
	ATOM	8505	OH2	WAT	W	323	37.620	75.876	-42.374	1.00	22.17	W
	ATOM	8506	OH2	WAT	W	324	31.748	51.402	-35.453	1.00	25.15	W
35	ATOM	8507	OH2	WAT	W	325	13.024	71.443	-0.523	1.00	29.86	W
	ATOM	8508	OH2	WAT	W	326	36.937	41.116	-24.855	1.00	27.46	W
	ATOM	8509	OH2	WAT	W	327	19.245	42.686	-2.510	1.00	29.66	W
	ATOM	8510	OH2	WAT	W	328	49.929	44.230	7.118	1.00	23.60	W
	ATOM	8511	OH2	WAT	W	329	37.331	45.560	-25.526	1.00	26.02	W
40	ATOM	8512	OH2	WAT	W	330	75.334	74.276	-19.598	1.00	24.04	W
	ATOM	8513	OH2	WAT	W	331	50.302	61.343	-31.180	1.00	20.21	W
	ATOM	8514	OH2	WAT	W	332	42.966	56.923	-31.510	1.00	28.63	W
	ATOM	8515	OH2	WAT	W	333	13.218	68.993	0.963	1.00	23.46	W
	ATOM	8516	OH2	WAT	W	334	40.987	83.074	-31.356	1.00	27.25	W
45	ATOM	8517	OH2	WAT	W	335	26.940	52.514	22.434	1.00	28.73	W
	ATOM	8518	OH2	WAT	W	336	12.531	66.524	-9.404	1.00	21.80	W
	ATOM	8519	OH2	WAT	W	337	42.599	39.444	-15.832	1.00	27.01	W
	ATOM	8520	OH2	WAT	W	338	48.048	48.441	16.333	1.00	19.47	W
	ATOM	8521	OH2	WAT	W	339	11.378	46.854	17.807	1.00	30.09	W
50	ATOM	8522	OH2	WAT	W	340	16.441	67.947	-19.971	1.00	21.87	W
	ATOM	8523	OH2	WAT	W	341	5.169	52.976	-6.017	1.00	34.52	W
	ATOM	8524	OH2	WAT	W	342	56.366	91.394	-25.691	1.00	22.25	W
	ATOM	8525	OH2	WAT	W	343	39.138	83.536	-27.276	1.00	21.07	W
	ATOM	8526	OH2	WAT	W	344	60.932	57.026	15.691	1.00	33.10	W
55	ATOM	8527	OH2	WAT	W	345	13.476	51.603	21.683	1.00	23.52	W
	ATOM	8528	OH2	WAT	W	346	43.478	94.149	-37.697	1.00	26.37	W
	ATOM	8529	OH2	WAT	W	347	28.012	35.395	-6.915	1.00	24.58	W
	ATOM	8530	OH2	WAT	W	348	80.215	64.256	-21.465	1.00	25.69	W
	ATOM	8531	OH2	WAT	W	349	51.571	45.254	9.731	1.00	32.98	W

5	ATOM	8532	OH2	WAT	W	350	21.425	46.768	-17.469	1.00	30.25	W
	ATOM	8533	OH2	WAT	W	351	47.390	72.020	-20.194	1.00	22.19	W
	ATOM	8534	OH2	WAT	W	352	21.553	86.243	-30.890	1.00	31.55	W
	ATOM	8535	OH2	WAT	W	353	33.014	67.065	21.351	1.00	20.88	W
	ATOM	8536	OH2	WAT	W	354	14.654	62.181	-14.551	1.00	20.03	W
	ATOM	8537	OH2	WAT	W	355	50.342	73.852	-25.133	1.00	24.70	W
	ATOM	8538	OH2	WAT	W	356	41.982	79.510	-23.663	1.00	24.72	W
	ATOM	8539	OH2	WAT	W	357	39.987	45.435	25.472	1.00	27.22	W
10	ATOM	8540	OH2	WAT	W	358	50.966	76.620	14.400	1.00	25.22	W
	ATOM	8541	OH2	WAT	W	359	38.560	45.243	-33.596	1.00	23.12	W
	ATOM	8542	OH2	WAT	W	360	61.497	54.297	-28.826	1.00	32.75	W
	ATOM	8543	OH2	WAT	W	361	53.745	46.872	23.471	1.00	27.63	W
15	ATOM	8544	OH2	WAT	W	362	57.002	43.240	-20.162	1.00	26.84	W
	ATOM	8545	OH2	WAT	W	363	67.620	54.903	-18.283	1.00	25.83	W
	ATOM	8546	OH2	WAT	W	364	42.433	80.253	-31.603	1.00	35.61	W
	ATOM	8547	OH2	WAT	W	365	29.079	62.396	-39.782	1.00	28.70	W
	ATOM	8548	OH2	WAT	W	366	26.835	61.857	10.737	1.00	29.62	W
	ATOM	8549	OH2	WAT	W	367	45.820	45.105	22.830	1.00	32.71	W
20	ATOM	8550	OH2	WAT	W	368	35.144	51.275	35.780	1.00	30.60	W
	ATOM	8551	OH2	WAT	W	369	57.657	62.439	7.864	1.00	30.02	W
	ATOM	8552	OH2	WAT	W	370	25.335	33.634	13.186	1.00	24.09	W
	ATOM	8553	OH2	WAT	W	371	27.668	59.493	8.703	1.00	24.24	W
	ATOM	8554	OH2	WAT	W	372	42.896	94.777	-30.168	1.00	42.53	W
25	ATOM	8555	OH2	WAT	W	373	13.858	58.126	-1.438	1.00	27.82	W
	ATOM	8556	OH2	WAT	W	374	49.215	76.579	5.508	1.00	27.65	W
	ATOM	8557	OH2	WAT	W	375	27.926	67.675	28.190	1.00	26.72	W
	ATOM	8558	OH2	WAT	W	376	41.928	39.313	16.708	1.00	34.69	W
	ATOM	8559	OH2	WAT	W	377	58.774	46.538	-1.484	1.00	18.42	W
	ATOM	8560	OH2	WAT	W	378	73.332	76.951	-18.539	1.00	31.21	W
30	ATOM	8561	OH2	WAT	W	379	19.667	39.457	17.556	1.00	20.16	W
	ATOM	8562	OH2	WAT	W	380	39.703	59.128	-18.068	1.00	17.51	W
	ATOM	8563	OH2	WAT	W	381	28.065	47.264	-31.490	1.00	27.85	W
	ATOM	8564	OH2	WAT	W	382	68.593	47.077	-16.564	1.00	25.08	W
	ATOM	8565	OH2	WAT	W	383	66.499	62.814	-13.279	1.00	22.18	W
	ATOM	8566	OH2	WAT	W	384	26.536	75.252	2.031	1.00	20.08	W
35	ATOM	8567	OH2	WAT	W	385	39.980	39.135	9.175	1.00	29.93	W
	ATOM	8568	OH2	WAT	W	386	21.531	47.191	39.117	1.00	28.17	W
	ATOM	8569	OH2	WAT	W	387	42.190	75.026	-41.376	1.00	29.68	W
	ATOM	8570	OH2	WAT	W	388	14.674	55.669	27.161	1.00	33.37	W
	ATOM	8571	OH2	WAT	W	389	28.615	59.877	-39.093	1.00	28.02	W
	ATOM	8572	OH2	WAT	W	390	39.193	43.075	22.527	1.00	29.86	W
40	ATOM	8573	OH2	WAT	W	391	16.422	52.881	-22.476	1.00	34.66	W
	ATOM	8574	OH2	WAT	W	392	27.247	35.033	29.275	1.00	28.11	W
	ATOM	8575	OH2	WAT	W	393	17.206	80.910	-7.468	1.00	30.36	W
	ATOM	8576	OH2	WAT	W	394	48.207	41.926	3.615	1.00	28.31	W
	ATOM	8577	OH2	WAT	W	395	73.428	51.496	-11.339	1.00	36.34	W
	ATOM	8578	OH2	WAT	W	396	58.697	53.866	-22.198	1.00	22.68	W
45	ATOM	8579	OH2	WAT	W	397	47.595	79.692	-18.600	1.00	24.41	W
	ATOM	8580	OH2	WAT	W	398	40.846	96.688	-37.242	1.00	26.13	W
	ATOM	8581	OH2	WAT	W	399	61.087	63.855	15.193	1.00	28.95	W
	ATOM	8582	OH2	WAT	W	400	59.255	37.753	-15.381	1.00	33.77	W
	ATOM	8583	OH2	WAT	W	401	21.106	30.423	17.584	1.00	37.08	W
	ATOM	8584	OH2	WAT	W	402	46.149	97.302	-43.888	1.00	30.85	W
50	ATOM	8585	OH2	WAT	W	403	21.596	86.357	-19.077	1.00	33.24	W
	ATOM	8586	OH2	WAT	W	404	20.559	68.440	22.185	1.00	27.53	W

5	ATOM	8587	OH2	WAT	W	405	45.436	70.103	-18.246	1.00	28.94	W
	ATOM	8588	OH2	WAT	W	406	17.493	70.844	6.619	1.00	35.50	W
	ATOM	8589	OH2	WAT	W	407	51.184	52.976	-28.552	1.00	26.56	W
	ATOM	8590	OH2	WAT	W	408	19.132	83.539	-25.709	1.00	32.11	W
	ATOM	8591	OH2	WAT	W	409	40.020	86.351	-21.792	1.00	26.97	W
10	ATOM	8592	OH2	WAT	W	410	22.565	66.347	29.045	1.00	35.45	W
	ATOM	8593	OH2	WAT	W	411	24.909	59.408	-36.350	1.00	33.36	W
	ATOM	8594	OH2	WAT	W	412	58.513	34.945	-5.934	1.00	31.42	W
	ATOM	8595	OH2	WAT	W	413	50.569	79.331	-15.684	1.00	27.02	W
	ATOM	8596	OH2	WAT	W	414	17.529	68.704	24.307	1.00	44.71	W
15	ATOM	8597	OH2	WAT	W	415	56.496	93.001	-29.377	1.00	26.99	W
	ATOM	8598	OH2	WAT	W	416	52.554	73.396	4.320	1.00	35.30	W
	ATOM	8599	OH2	WAT	W	417	21.928	36.838	0.097	1.00	26.39	W
	ATOM	8600	OH2	WAT	W	418	40.066	79.962	-28.061	1.00	30.33	W
	ATOM	8601	OH2	WAT	W	419	10.502	77.343	-5.022	1.00	32.53	W
20	ATOM	8602	OH2	WAT	W	420	26.186	64.608	8.450	1.00	14.74	W
	ATOM	8603	OH2	WAT	W	421	72.878	64.115	-21.052	1.00	28.29	W
	ATOM	8604	OH2	WAT	W	422	79.844	74.115	-17.720	1.00	34.35	W
	ATOM	8605	OH2	WAT	W	423	66.750	74.589	-4.406	1.00	29.82	W
	ATOM	8606	OH2	WAT	W	424	48.124	64.413	-28.378	1.00	28.57	W
25	ATOM	8607	OH2	WAT	W	425	42.583	39.574	-1.485	1.00	33.08	W
	ATOM	8608	OH2	WAT	W	426	63.043	67.969	-31.856	1.00	31.53	W
	ATOM	8609	OH2	WAT	W	427	24.135	42.133	-14.640	1.00	26.73	W
	ATOM	8610	OH2	WAT	W	428	27.597	50.981	13.326	1.00	22.07	W
	ATOM	8611	OH2	WAT	W	429	38.642	83.743	-39.756	1.00	27.77	W
30	ATOM	8612	OH2	WAT	W	430	76.638	74.336	-26.811	1.00	31.44	W
	ATOM	8613	OH2	WAT	W	431	28.844	72.533	22.350	1.00	24.75	W
	ATOM	8614	OH2	WAT	W	432	20.733	55.289	-35.819	1.00	32.46	W
	ATOM	8615	OH2	WAT	W	433	24.102	57.306	38.832	1.00	32.79	W
	ATOM	8616	OH2	WAT	W	434	38.103	49.334	-10.508	1.00	52.88	W
35	ATOM	8617	OH2	WAT	W	435	23.463	82.820	-40.699	1.00	25.30	W
	ATOM	8618	OH2	WAT	W	436	17.159	67.178	-26.028	1.00	32.43	W
	ATOM	8619	OH2	WAT	W	437	66.940	84.524	-22.088	1.00	39.61	W
	ATOM	8620	OH2	WAT	W	438	52.706	65.072	-28.075	1.00	53.96	W
	ATOM	8621	OH2	WAT	W	439	20.674	68.515	8.679	1.00	31.64	W
40	ATOM	8622	OH2	WAT	W	440	61.511	64.004	-30.897	1.00	35.45	W
	ATOM	8623	OH2	WAT	W	441	9.843	60.222	6.745	1.00	31.89	W
	ATOM	8624	OH2	WAT	W	442	31.554	86.043	-19.875	1.00	28.33	W
	ATOM	8625	OH2	WAT	W	443	28.136	88.065	-41.587	1.00	32.96	W
	ATOM	8626	OH2	WAT	W	444	44.810	82.831	-30.419	1.00	22.80	W
45	ATOM	8627	OH2	WAT	W	445	59.422	67.339	-34.536	1.00	27.17	W
	ATOM	8628	OH2	WAT	W	446	70.306	56.764	-12.670	1.00	30.28	W
	ATOM	8629	OH2	WAT	W	447	46.148	46.108	16.196	1.00	38.72	W
	ATOM	8630	OH2	WAT	W	448	46.024	83.007	-25.271	1.00	30.80	W
	ATOM	8631	OH2	WAT	W	449	56.891	87.883	-19.945	1.00	30.66	W
50	ATOM	8632	OH2	WAT	W	450	73.703	74.266	-5.840	1.00	24.67	W
	ATOM	8633	OH2	WAT	W	451	19.765	43.348	33.805	1.00	26.93	W
	ATOM	8634	OH2	WAT	W	452	79.355	51.266	-0.720	1.00	22.05	W
	ATOM	8635	OH2	WAT	W	453	65.936	45.515	-3.341	1.00	33.03	W
	ATOM	8636	OH2	WAT	W	454	48.270	78.072	-9.661	1.00	26.82	W
55	ATOM	8637	OH2	WAT	W	455	30.106	34.247	-1.347	1.00	31.61	W
	ATOM	8638	OH2	WAT	W	456	16.244	75.167	-24.092	1.00	37.53	W
	ATOM	8639	OH2	WAT	W	457	17.587	39.584	35.892	1.00	43.47	W
	ATOM	8640	OH2	WAT	W	458	22.585	31.274	29.286	1.00	34.35	W
	ATOM	8641	OH2	WAT	W	459	33.432	84.505	-18.281	1.00	18.32	W

5	ATOM	8642	OH2	WAT	W	460	41.293	95.068	-39.456	1.00	30.13	W
	ATOM	8643	OH2	WAT	W	461	44.216	83.808	-27.693	1.00	29.54	W
	ATOM	8644	OH2	WAT	W	462	30.848	57.443	4.499	1.00	24.35	W
	ATOM	8645	OH2	WAT	W	463	65.858	66.382	-0.390	1.00	23.54	W
	ATOM	8646	OH2	WAT	W	464	46.496	68.686	26.430	1.00	34.50	W
	ATOM	8647	OH2	WAT	W	465	70.058	61.949	-20.503	1.00	32.36	W
10	ATOM	8648	OH2	WAT	W	466	23.603	91.171	-25.989	1.00	36.74	W
	ATOM	8649	OH2	WAT	W	467	25.313	71.229	22.334	1.00	35.00	W
	ATOM	8650	OH2	WAT	W	468	13.930	69.551	26.567	1.00	25.16	W
	ATOM	8651	OH2	WAT	W	469	62.150	80.957	-19.141	1.00	29.07	W
	ATOM	8652	OH2	WAT	W	470	27.702	47.846	45.920	1.00	36.32	W
	ATOM	8653	OH2	WAT	W	471	24.849	34.267	0.227	1.00	38.79	W
15	ATOM	8654	OH2	WAT	W	472	57.544	69.087	13.346	1.00	41.68	W
	ATOM	8655	OH2	WAT	W	473	7.918	47.992	11.814	1.00	26.20	W
	ATOM	8656	OH2	WAT	W	474	71.374	59.946	0.845	1.00	32.73	W
	ATOM	8657	OH2	WAT	W	475	67.611	88.261	-23.317	1.00	26.99	W
	ATOM	8658	OH2	WAT	W	476	12.265	75.299	-13.600	1.00	38.45	W
	ATOM	8659	OH2	WAT	W	477	28.053	52.171	42.293	1.00	30.60	W
20	ATOM	8660	OH2	WAT	W	478	22.099	62.997	33.586	1.00	29.07	W
	ATOM	8661	OH2	WAT	W	479	59.364	67.033	-26.345	1.00	55.26	W
	ATOM	8662	OH2	WAT	W	480	34.109	87.415	-10.585	1.00	34.81	W
	ATOM	8663	OH2	WAT	W	481	30.244	36.564	29.055	1.00	26.04	W
	ATOM	8664	OH2	WAT	W	482	8.622	49.766	5.623	1.00	39.99	W
	ATOM	8665	OH2	WAT	W	483	41.947	67.496	29.311	1.00	29.88	W
25	ATOM	8666	OH2	WAT	W	484	72.522	75.947	-27.187	1.00	34.08	W
	ATOM	8667	OH2	WAT	W	485	8.810	44.612	12.806	1.00	30.32	W
	ATOM	8668	OH2	WAT	W	486	71.081	43.226	-15.424	1.00	37.75	W
	ATOM	8669	OH2	WAT	W	487	41.603	44.813	-24.389	1.00	26.97	W
	ATOM	8670	OH2	WAT	W	488	39.942	66.979	31.389	1.00	33.16	W
	ATOM	8671	OH2	WAT	W	489	53.330	52.741	26.220	1.00	30.83	W
30	ATOM	8672	OH2	WAT	W	490	26.012	44.653	-26.984	1.00	30.08	W
	ATOM	8673	OH2	WAT	W	491	19.614	52.647	-27.178	1.00	30.06	W
	ATOM	8674	OH2	WAT	W	492	71.069	95.514	-34.992	1.00	35.85	W
	ATOM	8675	OH2	WAT	W	493	47.995	64.623	-25.770	1.00	28.47	W
	ATOM	8676	OH2	WAT	W	494	44.647	64.565	-35.193	1.00	43.57	W
	ATOM	8677	OH2	WAT	W	495	17.869	53.128	35.601	1.00	33.86	W
35	ATOM	8678	OH2	WAT	W	496	83.555	70.250	-20.339	1.00	26.44	W
	ATOM	8679	OH2	WAT	W	497	43.886	79.681	-42.675	1.00	33.33	W
	ATOM	8680	OH2	WAT	W	498	22.649	62.755	16.163	1.00	30.46	W
	ATOM	8681	OH2	WAT	W	499	45.787	79.442	-8.060	1.00	26.37	W
	ATOM	8682	OH2	WAT	W	500	26.612	88.201	-4.086	1.00	36.66	W
	ATOM	8683	OH2	WAT	W	501	38.568	42.137	-22.285	1.00	35.38	W
40	ATOM	8684	OH2	WAT	W	502	36.970	29.325	12.903	1.00	40.61	W
	ATOM	8685	OH2	WAT	W	503	20.373	65.690	27.143	1.00	29.98	W
	ATOM	8686	OH2	WAT	W	504	6.788	59.476	2.793	1.00	39.82	W
	ATOM	8687	OH2	WAT	W	505	61.162	77.612	-12.985	1.00	26.24	W
	ATOM	8688	OH2	WAT	W	506	28.083	49.302	38.517	1.00	29.75	W
	ATOM	8689	OH2	WAT	W	507	29.143	41.147	-25.689	1.00	30.45	W
45	ATOM	8690	OH2	WAT	W	508	19.441	67.572	-2.825	1.00	31.10	W
	ATOM	8691	OH2	WAT	W	509	43.421	41.867	-7.636	1.00	25.84	W
	ATOM	8692	OH2	WAT	W	510	48.778	55.138	-22.650	1.00	24.48	W
	ATOM	8693	OH2	WAT	W	511	26.304	81.967	-3.669	1.00	59.92	W
	ATOM	8694	OH2	WAT	W	512	35.823	38.962	-16.238	1.00	34.57	W
	ATOM	8695	OH2	WAT	W	513	58.609	51.303	22.182	1.00	21.16	W
55	ATOM	8696	OH2	WAT	W	514	53.978	45.768	4.798	1.00	38.64	W

5	ATOM	8697	OH2	WAT	W	515	46.492	80.496	-42.683	1.00	36.59	W
	ATOM	8698	OH2	WAT	W	516	71.760	84.670	-19.901	1.00	26.72	W
	ATOM	8699	OH2	WAT	W	517	61.084	67.579	-36.593	1.00	31.75	W
	ATOM	8700	OH2	WAT	W	518	38.336	31.513	16.723	1.00	46.16	W
	ATOM	8701	OH2	WAT	W	519	58.345	34.917	-12.173	1.00	32.99	W
10	ATOM	8702	OH2	WAT	W	520	21.043	79.711	-23.638	1.00	26.06	W
	ATOM	8703	OH2	WAT	W	521	51.272	71.528	-20.158	1.00	20.05	W
	ATOM	8704	OH2	WAT	W	522	32.016	85.400	-8.674	1.00	29.42	W
	ATOM	8705	OH2	WAT	W	523	21.535	29.268	27.784	1.00	34.66	W
	ATOM	8706	OH2	WAT	W	524	21.912	87.705	-6.947	1.00	46.50	W
15	ATOM	8707	OH2	WAT	W	525	31.620	57.576	37.407	1.00	24.48	W
	ATOM	8708	OH2	WAT	W	526	17.389	81.606	-17.144	1.00	43.70	W
	ATOM	8709	OH2	WAT	W	527	51.987	59.263	6.165	1.00	56.07	W
	ATOM	8710	OH2	WAT	W	528	22.039	80.414	-35.965	1.00	28.87	W
	ATOM	8711	OH2	WAT	W	529	25.523	74.218	8.623	1.00	19.22	W
20	ATOM	8712	OH2	WAT	W	530	21.682	80.087	5.339	1.00	34.53	W
	ATOM	8713	OH2	WAT	W	531	48.616	94.265	-37.235	1.00	43.59	W
	ATOM	8714	OH2	WAT	W	532	39.857	38.874	-3.549	1.00	31.28	W
	ATOM	8715	OH2	WAT	W	533	39.693	96.380	-28.089	1.00	44.71	W
	ATOM	8716	OH2	WAT	W	534	36.699	35.085	-15.806	1.00	33.87	W
25	ATOM	8717	OH2	WAT	W	535	34.981	45.880	33.336	1.00	17.58	W
	ATOM	8718	OH2	WAT	W	536	55.752	78.071	-1.645	1.00	36.67	W
	ATOM	8719	OH2	WAT	W	537	69.964	62.216	-0.087	1.00	33.47	W
	ATOM	8720	OH2	WAT	W	538	46.113	74.500	22.679	1.00	31.71	W
	ATOM	8721	OH2	WAT	W	539	48.482	46.071	-23.200	1.00	33.97	W
30	ATOM	8722	OH2	WAT	W	540	60.421	92.222	-28.586	1.00	34.39	W
	ATOM	8723	OH2	WAT	W	541	37.644	62.372	35.379	1.00	36.29	W
	ATOM	8724	OH2	WAT	W	542	29.209	63.265	-37.460	1.00	56.13	W
	ATOM	8725	OH2	WAT	W	543	61.264	48.115	-31.707	1.00	49.40	W
	ATOM	8726	OH2	WAT	W	544	61.974	83.566	-38.096	1.00	31.08	W
35	ATOM	8727	OH2	WAT	W	545	62.940	42.943	-20.920	1.00	27.15	W
	ATOM	8728	OH2	WAT	W	546	53.465	44.416	22.714	1.00	34.54	W
	ATOM	8729	OH2	WAT	W	547	30.815	34.793	-9.434	1.00	36.45	W
	ATOM	8730	OH2	WAT	W	548	29.471	31.641	21.751	1.00	34.56	W
	ATOM	8731	OH2	WAT	W	549	78.607	69.017	-12.205	1.00	28.49	W
40	ATOM	8732	OH2	WAT	W	550	31.429	69.250	-45.559	1.00	34.20	W
	ATOM	8733	OH2	WAT	W	551	73.435	82.540	-21.336	1.00	27.02	W
	ATOM	8734	OH2	WAT	W	552	47.327	71.323	-23.894	1.00	41.40	W
	ATOM	8735	OH2	WAT	W	553	20.476	37.997	12.047	1.00	29.83	W
	ATOM	8736	OH2	WAT	W	554	35.058	95.246	-32.227	1.00	34.09	W
45	ATOM	8737	OH2	WAT	W	555	17.108	41.547	9.120	1.00	36.08	W
	ATOM	8738	OH2	WAT	W	556	20.640	80.355	-33.668	1.00	40.07	W
	ATOM	8739	OH2	WAT	W	557	49.088	92.026	-24.040	1.00	33.71	W
	ATOM	8740	OH2	WAT	W	558	43.763	44.871	19.288	1.00	34.59	W
	ATOM	8741	OH2	WAT	W	559	21.204	35.660	-5.134	1.00	32.08	W
50	ATOM	8742	OH2	WAT	W	560	65.009	88.087	-24.210	1.00	29.80	W
	ATOM	8743	OH2	WAT	W	561	46.916	53.996	-21.422	1.00	33.60	W
	ATOM	8744	OH2	WAT	W	562	71.404	63.255	-27.114	1.00	40.61	W
	ATOM	8745	OH2	WAT	W	563	20.015	35.616	25.763	1.00	30.97	W
	ATOM	8746	OH2	WAT	W	564	59.355	87.240	-45.689	1.00	37.04	W
55	ATOM	8747	OH2	WAT	W	565	51.864	34.258	-7.762	1.00	49.22	W
	ATOM	8748	OH2	WAT	W	566	56.208	79.437	-15.027	1.00	37.82	W
	ATOM	8749	OH2	WAT	W	567	28.902	70.034	-39.462	1.00	28.91	W
	ATOM	8750	OH2	WAT	W	568	45.154	83.397	-43.261	1.00	42.35	W
	ATOM	8751	OH2	WAT	W	569	29.727	81.729	-42.805	1.00	41.68	W

5	ATOM	8752	OH2	WAT	W	570	28.533	90.869	-42.604	1.00	31.64	W
	ATOM	8753	OH2	WAT	W	571	19.677	84.860	-28.486	1.00	44.44	W
	ATOM	8754	OH2	WAT	W	572	37.852	97.435	-30.634	1.00	44.72	W
	ATOM	8755	OH2	WAT	W	573	40.615	44.612	-31.597	1.00	42.55	W
	ATOM	8756	OH2	WAT	W	574	21.022	41.654	35.102	1.00	36.46	W
	ATOM	8757	OH2	WAT	W	575	39.353	30.564	13.190	1.00	48.83	W
	ATOM	8758	OH2	WAT	W	576	62.189	85.929	-23.040	1.00	32.28	W
	ATOM	8759	OH2	WAT	W	577	31.076	68.489	14.056	1.00	15.60	W
10	ATOM	8760	OH2	WAT	W	578	28.012	67.450	33.693	1.00	40.99	W
	ATOM	8761	OH2	WAT	W	579	14.920	63.590	-25.823	1.00	25.17	W
	ATOM	8762	OH2	WAT	W	580	29.779	72.346	12.292	1.00	14.98	W
	ATOM	8763	OH2	WAT	W	581	61.161	93.203	-38.580	1.00	45.25	W
15	ATOM	8764	OH2	WAT	W	582	59.322	62.288	25.727	1.00	29.38	W
	ATOM	8765	OH2	WAT	W	583	51.208	79.524	-1.693	1.00	29.35	W
	ATOM	8766	OH2	WAT	W	584	21.375	60.546	26.774	1.00	52.30	W
	ATOM	8767	OH2	WAT	W	585	59.422	91.535	-35.103	1.00	27.02	W
	ATOM	8768	OH2	WAT	W	586	24.246	60.834	35.994	1.00	32.50	W
20	ATOM	8769	OH2	WAT	W	587	11.430	62.017	0.147	1.00	40.24	W
	ATOM	8770	OH2	WAT	W	588	55.140	80.683	-19.320	1.00	24.62	W
	ATOM	8771	OH2	WAT	W	589	16.965	74.567	-28.649	1.00	38.99	W
	ATOM	8772	OH2	WAT	W	590	40.708	40.703	-21.403	1.00	30.96	W
	ATOM	8773	OH2	WAT	W	591	28.184	68.576	-46.105	1.00	47.34	W
	ATOM	8774	OH2	WAT	W	592	40.001	35.508	11.320	1.00	23.27	W
25	ATOM	8775	OH2	WAT	W	593	19.051	80.665	-11.861	1.00	31.12	W
	ATOM	8776	OH2	WAT	W	594	64.968	80.063	-8.839	1.00	41.14	W
	ATOM	8777	OH2	WAT	W	595	72.984	43.604	-12.198	1.00	34.73	W
	ATOM	8778	OH2	WAT	W	596	12.889	74.876	-19.207	1.00	37.16	W
	ATOM	8779	OH2	WAT	W	597	57.083	75.724	-2.830	1.00	31.22	W
30	ATOM	8780	OH2	WAT	W	598	20.946	58.561	37.844	1.00	38.60	W
	ATOM	8781	OH2	WAT	W	599	50.726	77.525	2.133	1.00	40.85	W
	ATOM	8782	OH2	WAT	W	600	28.394	45.572	40.705	1.00	44.08	W
	ATOM	8783	OH2	WAT	W	601	23.052	36.982	13.354	1.00	27.57	W
	ATOM	8784	OH2	WAT	W	602	33.276	39.668	-19.126	1.00	45.50	W
35	ATOM	8785	OH2	WAT	W	603	33.717	49.409	-15.061	1.00	49.24	W
	ATOM	8786	OH2	WAT	W	604	29.452	88.986	-26.113	1.00	14.64	W
	ATOM	8787	OH2	WAT	W	605	37.094	33.825	5.788	1.00	36.96	W
	ATOM	8788	OH2	WAT	W	606	71.840	62.869	-18.101	1.00	33.45	W
	ATOM	8789	OH2	WAT	W	607	34.316	70.286	-44.856	1.00	35.57	W
40	ATOM	8790	OH2	WAT	W	608	64.261	77.372	0.343	1.00	41.73	W
	ATOM	8791	OH2	WAT	W	609	35.766	55.966	8.537	1.00	61.84	W
	ATOM	8792	OH2	WAT	W	610	30.712	51.359	39.606	1.00	41.26	W
	ATOM	8793	OH2	WAT	W	611	54.267	58.059	-13.818	1.00	54.40	W
	ATOM	8794	OH2	WAT	W	612	21.028	54.609	46.901	1.00	38.62	W
45	ATOM	8795	OH2	WAT	W	613	14.508	50.708	0.979	1.00	32.56	W
	ATOM	8796	OH2	WAT	W	614	25.322	91.719	-32.996	1.00	42.32	W
	ATOM	8797	OH2	WAT	W	615	73.153	71.399	-29.195	1.00	42.43	W
	ATOM	8798	OH2	WAT	W	616	55.707	38.604	0.984	1.00	44.24	W
	ATOM	8799	OH2	WAT	W	617	37.463	84.235	4.510	1.00	42.83	W
50	ATOM	8800	OH2	WAT	W	618	45.682	55.261	10.267	1.00	45.85	W
	ATOM	8801	OH2	WAT	W	619	67.043	81.358	-11.165	1.00	31.78	W
	ATOM	8802	OH2	WAT	W	620	40.544	89.334	-19.559	1.00	47.91	W
	ATOM	8803	OH2	WAT	W	621	43.777	56.722	33.517	1.00	27.63	W
	ATOM	8804	OH2	WAT	W	622	56.281	50.279	-30.462	1.00	48.83	W
55	ATOM	8805	OH2	WAT	W	623	63.571	57.555	26.026	1.00	41.71	W
	ATOM	8806	OH2	WAT	W	624	62.158	48.421	-20.935	1.00	38.60	W

5	ATOM	8807	OH2	WAT	W	625	62.877	59.693	-22.146	1.00	60.99	W
	ATOM	8808	OH2	WAT	W	626	39.812	77.874	13.633	1.00	45.54	W
	ATOM	8809	OH2	WAT	W	627	26.711	91.998	-27.596	1.00	30.68	W
	ATOM	8810	OH2	WAT	W	628	13.505	70.317	-9.667	1.00	32.85	W
	ATOM	8811	OH2	WAT	W	629	60.642	79.086	-41.474	1.00	27.69	W
10	ATOM	8812	OH2	WAT	W	630	39.181	43.469	26.620	1.00	39.36	W
	ATOM	8813	OH2	WAT	W	631	11.991	71.039	2.437	1.00	33.17	W
	ATOM	8814	OH2	WAT	W	632	36.447	62.759	-38.362	1.00	30.08	W
	ATOM	8815	OH2	WAT	W	633	75.969	83.252	-25.278	1.00	45.04	W
	ATOM	8816	OH2	WAT	W	634	37.698	80.761	-0.575	1.00	24.24	W
15	ATOM	8817	OH2	WAT	W	635	47.369	53.715	35.730	1.00	45.08	W
	ATOM	8818	OH2	WAT	W	636	48.732	98.012	-33.807	1.00	34.63	W
	ATOM	8819	OH2	WAT	W	637	63.265	75.050	-45.725	1.00	38.33	W
	ATOM	8820	OH2	WAT	W	638	60.032	71.956	0.252	1.00	44.76	W
	ATOM	8821	OH2	WAT	W	639	40.988	48.143	-29.350	1.00	45.67	W
20	ATOM	8822	OH2	WAT	W	640	55.258	40.282	-12.634	1.00	60.28	W
	ATOM	8823	OH2	WAT	W	641	75.283	84.086	-22.829	1.00	44.58	W
	ATOM	8824	OH2	WAT	W	642	63.431	52.143	-0.405	1.00	29.19	W
	ATOM	8825	OH2	WAT	W	643	37.172	36.738	19.246	1.00	53.77	W
	ATOM	8826	OH2	WAT	W	644	57.876	36.061	-2.371	1.00	48.71	W
25	ATOM	8827	OH2	WAT	W	645	23.212	48.887	-36.113	1.00	40.06	W
	ATOM	8828	OH2	WAT	W	646	18.060	71.467	-29.825	1.00	43.44	W
	ATOM	8829	OH2	WAT	W	647	30.795	40.421	38.172	1.00	47.17	W
	ATOM	8830	OH2	WAT	W	648	27.612	50.327	23.213	1.00	31.47	W
	ATOM	8831	OH2	WAT	W	649	30.574	47.809	40.324	1.00	45.57	W
30	ATOM	8832	OH2	WAT	W	650	59.939	52.951	-30.672	1.00	35.35	W
	ATOM	8833	OH2	WAT	W	651	44.795	40.676	13.160	1.00	33.50	W
	ATOM	8834	OH2	WAT	W	652	34.039	47.923	36.038	1.00	38.29	W
	ATOM	8835	OH2	WAT	W	653	27.160	82.334	3.179	1.00	31.70	W
	ATOM	8836	OH2	WAT	W	654	58.512	92.375	-42.108	1.00	40.35	W
35	ATOM	8837	OH2	WAT	W	655	49.129	52.314	-37.841	1.00	44.78	W
	ATOM	8838	OH2	WAT	W	656	53.318	71.106	-16.915	1.00	25.96	W
	ATOM	8839	OH2	WAT	W	657	57.576	62.821	-15.538	1.00	50.70	W
	ATOM	8840	OH2	WAT	W	658	28.417	44.432	-29.609	1.00	36.13	W
	ATOM	8841	OH2	WAT	W	659	49.113	49.428	-38.284	1.00	45.00	W
40	ATOM	8842	OH2	WAT	W	660	35.586	77.729	-43.101	1.00	33.39	W
	ATOM	8843	OH2	WAT	W	661	9.841	58.788	17.855	1.00	42.14	W
	ATOM	8844	OH2	WAT	W	662	61.026	45.578	-3.773	1.00	34.99	W
	ATOM	8845	OH2	WAT	W	663	65.493	78.967	-5.769	1.00	29.19	W
	ATOM	8846	OH2	WAT	W	664	7.025	58.334	14.662	1.00	44.10	W
45	ATOM	8847	OH2	WAT	W	665	49.654	50.855	32.514	1.00	30.08	W
	ATOM	8848	OH2	WAT	W	666	18.545	62.489	22.933	1.00	60.50	W
	ATOM	8849	OH2	WAT	W	667	30.379	34.204	21.118	1.00	44.65	W
	ATOM	8850	OH2	WAT	W	668	17.488	45.677	-14.303	1.00	32.55	W
	ATOM	8851	OH2	WAT	W	669	28.754	55.348	39.968	1.00	33.20	W
50	ATOM	8852	OH2	WAT	W	670	50.808	60.080	-8.922	1.00	11.10	W
	ATOM	8853	OH2	WAT	W	671	43.864	63.224	-28.667	1.00	10.75	W
	ATOM	8854	OH2	WAT	W	672	38.132	82.008	-31.368	1.00	15.05	W
	ATOM	8855	OH2	WAT	W	673	32.332	39.227	-4.953	1.00	11.43	W
	ATOM	8856	OH2	WAT	W	674	60.350	61.096	-18.141	1.00	13.21	W
55	ATOM	8857	OH2	WAT	W	675	63.171	58.710	-1.441	1.00	12.30	W
	ATOM	8858	OH2	WAT	W	676	60.719	61.106	-3.556	1.00	11.61	W
	ATOM	8859	OH2	WAT	W	677	46.645	74.659	7.750	1.00	13.33	W
	ATOM	8860	OH2	WAT	W	678	54.976	57.679	-0.489	1.00	13.83	W
	ATOM	8861	OH2	WAT	W	679	30.171	75.105	-29.268	1.00	12.68	W

5	ATOM	8862	OH2	WAT	W	680	58.910	56.848	-1.463	1.00	12.78	W
	ATOM	8863	OH2	WAT	W	681	58.707	52.780	-0.068	1.00	16.81	W
	ATOM	8864	OH2	WAT	W	682	63.035	61.198	-4.943	1.00	15.69	W
	ATOM	8865	OH2	WAT	W	683	27.871	48.752	12.133	1.00	14.85	W
	ATOM	8866	OH2	WAT	W	684	66.593	56.371	-20.257	1.00	17.09	W
10	ATOM	8867	OH2	WAT	W	685	19.823	46.911	-14.372	1.00	18.34	W
	ATOM	8868	OH2	WAT	W	686	38.651	69.400	-38.144	1.00	18.58	W
	ATOM	8869	OH2	WAT	W	687	33.756	60.443	23.244	1.00	16.84	W
	ATOM	8870	OH2	WAT	W	688	39.615	55.787	3.023	1.00	13.33	W
	ATOM	8871	OH2	WAT	W	689	24.685	61.650	9.133	1.00	15.12	W
15	ATOM	8872	OH2	WAT	W	690	16.852	57.351	13.005	1.00	17.76	W
	ATOM	8873	OH2	WAT	W	691	39.357	69.360	-35.452	1.00	16.14	W
	ATOM	8874	OH2	WAT	W	692	49.896	67.829	4.102	1.00	22.12	W
	ATOM	8875	OH2	WAT	W	693	27.767	53.520	20.006	1.00	16.13	W
	ATOM	8876	OH2	WAT	W	694	29.589	83.211	2.374	1.00	17.47	W
20	ATOM	8877	OH2	WAT	W	695	28.136	91.131	-25.283	1.00	18.51	W
	ATOM	8878	OH2	WAT	W	696	46.056	77.858	9.469	1.00	18.58	W
	ATOM	8879	OH2	WAT	W	697	12.598	49.461	17.773	1.00	23.12	W
	ATOM	8880	OH2	WAT	W	698	81.171	68.689	-11.423	1.00	23.28	W
	ATOM	8881	OH2	WAT	W	699	41.447	44.917	-6.984	1.00	18.12	W
25	ATOM	8882	OH2	WAT	W	700	45.659	67.938	-27.584	1.00	23.36	W
	ATOM	8883	OH2	WAT	W	701	14.273	50.690	24.204	1.00	20.19	W
	ATOM	8884	OH2	WAT	W	702	67.431	46.612	-1.390	1.00	27.25	W
	ATOM	8885	OH2	WAT	W	703	9.075	50.498	8.166	1.00	25.31	W
	ATOM	8886	OH2	WAT	W	704	48.417	40.958	-1.139	1.00	23.15	W
30	ATOM	8887	OH2	WAT	W	705	17.999	74.642	3.920	1.00	32.70	W
	ATOM	8888	OH2	WAT	W	706	44.829	55.254	-18.432	1.00	22.53	W
	ATOM	8889	OH2	WAT	W	707	83.508	66.537	-15.459	1.00	23.10	W
	ATOM	8890	OH2	WAT	W	708	48.839	69.212	-36.856	1.00	22.09	W
	ATOM	8891	OH2	WAT	W	709	51.752	70.380	-38.057	1.00	23.90	W
35	ATOM	8892	OH2	WAT	W	710	29.658	72.517	34.348	1.00	30.12	W
	ATOM	8893	OH2	WAT	W	711	37.525	61.580	-32.546	1.00	23.53	W
	ATOM	8894	OH2	WAT	W	712	57.377	49.104	21.315	1.00	21.68	W
	ATOM	8895	OH2	WAT	W	713	42.963	59.616	-31.428	1.00	23.43	W
	ATOM	8896	OH2	WAT	W	714	31.988	34.471	-3.304	1.00	25.07	W
40	ATOM	8897	OH2	WAT	W	715	37.084	59.237	-33.588	1.00	24.72	W
	ATOM	8898	OH2	WAT	W	716	61.591	59.246	14.600	1.00	28.80	W
	ATOM	8899	OH2	WAT	W	717	40.198	56.424	-19.000	1.00	23.02	W
	ATOM	8900	OH2	WAT	W	718	47.473	87.662	-44.201	1.00	50.29	W
	ATOM	8901	OH2	WAT	W	719	61.734	76.696	-10.423	1.00	16.92	W
45	ATOM	8902	OH2	WAT	W	720	79.475	50.923	-11.448	1.00	40.12	W
	ATOM	8903	OH2	WAT	W	721	37.556	51.763	-18.478	1.00	21.63	W
	ATOM	8904	OH2	WAT	W	722	25.699	52.296	13.033	1.00	19.81	W
	ATOM	8905	OH2	WAT	W	723	69.562	64.077	-28.574	1.00	28.25	W
	ATOM	8906	OH2	WAT	W	724	72.923	66.789	-10.029	1.00	26.74	W
50	ATOM	8907	OH2	WAT	W	725	42.712	56.570	2.479	1.00	32.14	W
	ATOM	8908	OH2	WAT	W	726	56.019	65.333	-36.093	1.00	21.69	W
	ATOM	8909	OH2	WAT	W	727	17.870	66.389	28.045	1.00	31.05	W
	ATOM	8910	OH2	WAT	W	728	11.744	63.777	-16.973	1.00	25.14	W
	ATOM	8911	OH2	WAT	W	729	35.294	86.458	-17.918	1.00	29.79	W
55	ATOM	8912	OH2	WAT	W	730	9.739	60.417	-20.395	1.00	28.25	W
	ATOM	8913	OH2	WAT	W	731	11.654	48.520	-2.460	1.00	33.38	W
	ATOM	8914	OH2	WAT	W	732	40.614	57.118	31.023	1.00	26.07	W
	ATOM	8915	OH2	WAT	W	733	39.777	53.158	36.413	1.00	33.49	W
	ATOM	8916	OH2	WAT	W	734	49.845	47.366	28.829	1.00	26.70	W

5	ATOM	8917	OH2	WAT	W	735	24.110	34.457	15.334	1.00	29.67	W
	ATOM	8918	OH2	WAT	W	736	59.490	51.073	24.831	1.00	29.86	W
	ATOM	8919	OH2	WAT	W	737	38.054	83.336	-1.120	1.00	28.89	W
	ATOM	8920	OH2	WAT	W	738	13.039	51.650	-12.216	1.00	30.21	W
	ATOM	8921	OH2	WAT	W	739	48.500	50.823	35.082	1.00	34.12	W
10	ATOM	8922	OH2	WAT	W	740	47.989	41.707	-5.554	1.00	31.61	W
	ATOM	8923	OH2	WAT	W	741	22.205	40.959	-11.330	1.00	33.16	W
	ATOM	8924	OH2	WAT	W	742	16.134	36.485	16.269	1.00	29.31	W
	ATOM	8925	OH2	WAT	W	743	22.480	68.170	20.286	1.00	24.77	W
	ATOM	8926	OH2	WAT	W	744	72.049	47.322	-17.960	1.00	29.07	W
15	ATOM	8927	OH2	WAT	W	745	40.857	85.387	-11.973	1.00	23.51	W
	ATOM	8928	OH2	WAT	W	746	56.744	46.789	15.703	1.00	28.26	W
	ATOM	8929	OH2	WAT	W	747	51.904	64.105	24.543	1.00	27.18	W
	ATOM	8930	OH2	WAT	W	748	56.575	58.583	1.344	1.00	31.09	W
	ATOM	8931	OH2	WAT	W	749	57.373	58.561	5.484	1.00	29.43	W
20	ATOM	8932	OH2	WAT	W	750	75.104	64.410	-16.417	1.00	31.68	W
	ATOM	8933	OH2	WAT	W	751	14.670	70.784	-23.138	1.00	25.91	W
	ATOM	8934	OH2	WAT	W	752	12.911	52.355	-15.033	1.00	28.96	W
	ATOM	8935	OH2	WAT	W	753	12.990	62.108	-25.006	1.00	33.01	W
	ATOM	8936	OH2	WAT	W	754	23.345	87.363	-32.635	1.00	32.61	W
25	ATOM	8937	OH2	WAT	W	755	66.469	81.830	-14.265	1.00	24.46	W
	ATOM	8938	OH2	WAT	W	756	47.252	61.569	-28.848	1.00	30.46	W
	ATOM	8939	OH2	WAT	W	757	52.546	71.147	5.890	1.00	33.46	W
	ATOM	8940	OH2	WAT	W	758	41.001	56.046	-33.215	1.00	27.40	W
	ATOM	8941	OH2	WAT	W	759	39.617	39.925	19.990	1.00	31.20	W
30	ATOM	8942	OH2	WAT	W	760	44.781	55.360	36.095	1.00	36.29	W
	ATOM	8943	OH2	WAT	W	761	13.955	62.545	14.561	1.00	24.95	W
	ATOM	8944	OH2	WAT	W	762	39.940	39.555	-0.351	1.00	33.58	W
	ATOM	8945	OH2	WAT	W	763	32.665	69.642	22.088	1.00	26.34	W
	ATOM	8946	OH2	WAT	W	764	42.575	43.594	-11.934	1.00	31.73	W
35	ATOM	8947	OH2	WAT	W	765	26.998	41.795	-27.476	1.00	34.79	W
	ATOM	8948	OH2	WAT	W	766	19.705	41.788	-5.040	1.00	30.18	W
	ATOM	8949	OH2	WAT	W	767	13.729	60.851	7.587	1.00	31.12	W
	ATOM	8950	OH2	WAT	W	768	46.594	45.832	11.529	1.00	30.71	W
	ATOM	8951	OH2	WAT	W	769	43.004	68.714	-30.001	1.00	34.08	W
40	ATOM	8952	OH2	WAT	W	770	24.346	54.101	-8.362	1.00	40.20	W
	ATOM	8953	OH2	WAT	W	771	47.715	70.196	-16.599	1.00	29.28	W
	ATOM	8954	OH2	WAT	W	772	58.821	93.877	-27.444	1.00	33.88	W
	ATOM	8955	OH2	WAT	W	773	31.148	79.112	-42.939	1.00	36.00	W
	ATOM	8956	OH2	WAT	W	774	22.053	42.741	-13.266	1.00	29.08	W
45	ATOM	8957	OH2	WAT	W	775	52.877	92.345	-23.218	1.00	28.25	W
	ATOM	8958	OH2	WAT	W	776	60.172	51.088	20.144	1.00	37.24	W
	ATOM	8959	OH2	WAT	W	777	60.950	56.059	1.983	1.00	32.34	W
	ATOM	8960	OH2	WAT	W	778	19.502	58.697	-36.820	1.00	28.69	W
	ATOM	8961	OH2	WAT	W	779	30.076	50.066	12.361	1.00	66.40	W
50	ATOM	8962	OH2	WAT	W	780	26.320	66.838	19.785	1.00	20.83	W
	ATOM	8963	OH2	WAT	W	781	12.032	41.651	19.833	1.00	27.28	W
	ATOM	8964	OH2	WAT	W	782	69.452	77.231	-34.140	1.00	32.70	W
	ATOM	8965	OH2	WAT	W	783	16.602	43.039	-2.678	1.00	24.99	W
	ATOM	8966	OH2	WAT	W	784	35.764	60.018	-37.747	1.00	36.97	W
55	ATOM	8967	OH2	WAT	W	785	33.876	66.348	-42.439	1.00	39.91	W
	ATOM	8968	OH2	WAT	W	786	57.127	36.355	-14.326	1.00	37.67	W
	ATOM	8969	OH2	WAT	W	787	37.130	37.609	2.903	1.00	39.84	W
	ATOM	8970	OH2	WAT	W	788	51.220	66.924	8.375	1.00	31.06	W
	ATOM	8971	OH2	WAT	W	789	10.804	51.718	21.423	1.00	33.84	W

5	ATOM	8972	OH2	WAT	W	790	30.270	87.469	-15.061	1.00	26.18	W
	ATOM	8973	OH2	WAT	W	791	41.988	55.052	-17.332	1.00	31.54	W
	ATOM	8974	OH2	WAT	W	792	48.606	76.258	8.357	1.00	38.63	W
	ATOM	8975	OH2	WAT	W	793	29.552	75.900	10.796	1.00	22.83	W
	ATOM	8976	OH2	WAT	W	794	42.986	98.280	-37.052	1.00	36.49	W
10	ATOM	8977	OH2	WAT	W	795	23.446	66.228	9.839	1.00	36.96	W
	ATOM	8978	OH2	WAT	W	796	64.807	79.091	-1.652	1.00	32.76	W
	ATOM	8979	OH2	WAT	W	797	43.476	40.507	-22.892	1.00	31.16	W
	ATOM	8980	OH2	WAT	W	798	59.402	49.107	2.170	1.00	36.25	W
	ATOM	8981	OH2	WAT	W	799	68.966	41.741	-17.222	1.00	33.61	W
15	ATOM	8982	OH2	WAT	W	800	24.793	71.941	-39.851	1.00	21.86	W
	ATOM	8983	OH2	WAT	W	801	23.767	48.580	-24.246	1.00	34.92	W
	ATOM	8984	OH2	WAT	W	802	46.980	68.168	-24.735	1.00	26.18	W
	ATOM	8985	OH2	WAT	W	803	53.458	53.195	-29.972	1.00	28.69	W
	ATOM	8986	OH2	WAT	W	804	24.862	34.453	35.634	1.00	36.72	W
20	ATOM	8987	OH2	WAT	W	805	13.428	52.674	25.889	1.00	33.75	W
	ATOM	8988	OH2	WAT	W	806	51.562	44.638	2.845	1.00	28.99	W
	ATOM	8989	OH2	WAT	W	807	21.377	55.670	39.671	1.00	40.73	W
	ATOM	8990	OH2	WAT	W	808	64.134	70.734	-5.183	1.00	21.34	W
	ATOM	8991	OH2	WAT	W	809	46.972	89.853	-23.163	1.00	38.24	W
25	ATOM	8992	OH2	WAT	W	810	8.000	53.174	-7.596	1.00	25.72	W
	ATOM	8993	OH2	WAT	W	811	22.177	80.927	-42.182	1.00	30.13	W
	ATOM	8994	OH2	WAT	W	812	63.779	65.758	-30.505	1.00	44.49	W
	ATOM	8995	OH2	WAT	W	813	18.366	48.706	-19.763	1.00	34.11	W
	ATOM	8996	OH2	WAT	W	814	59.401	76.927	-4.247	1.00	31.82	W
30	ATOM	8997	OH2	WAT	W	815	21.046	84.135	-12.381	1.00	30.70	W
	ATOM	8998	OH2	WAT	W	816	55.643	67.386	13.253	1.00	42.99	W
	ATOM	8999	OH2	WAT	W	817	19.135	52.415	-31.528	1.00	43.38	W
	ATOM	9000	OH2	WAT	W	818	67.337	85.739	-35.938	1.00	31.07	W
	ATOM	9001	OH2	WAT	W	819	29.637	75.151	22.301	1.00	26.35	W
35	ATOM	9002	OH2	WAT	W	820	32.750	84.350	0.358	1.00	22.00	W
	ATOM	9003	OH2	WAT	W	821	45.598	65.481	-28.648	1.00	31.79	W
	ATOM	9004	OH2	WAT	W	822	12.768	62.241	-2.419	1.00	31.35	W
	ATOM	9005	OH2	WAT	W	823	25.799	63.445	13.810	1.00	32.36	W
	ATOM	9006	OH2	WAT	W	824	28.556	34.999	32.201	1.00	37.91	W
40	ATOM	9007	OH2	WAT	W	825	36.020	68.674	23.466	1.00	35.59	W
	ATOM	9008	OH2	WAT	W	826	31.938	33.896	17.286	1.00	39.46	W
	ATOM	9009	OH2	WAT	W	827	41.647	84.318	-2.417	1.00	41.96	W
	ATOM	9010	OH2	WAT	W	828	40.024	100.332	-31.852	1.00	43.82	W
	ATOM	9011	OH2	WAT	W	829	28.695	63.602	10.619	1.00	15.02	W
45	ATOM	9012	OH2	WAT	W	830	54.701	82.602	-44.566	1.00	41.37	W
	ATOM	9013	OH2	WAT	W	831	69.916	53.723	-10.485	1.00	30.03	W
	ATOM	9014	OH2	WAT	W	832	36.974	79.509	-2.521	1.00	47.01	W
	ATOM	9015	OH2	WAT	W	833	12.230	64.667	-12.621	1.00	35.16	W
	ATOM	9016	OH2	WAT	W	834	39.082	50.367	36.260	1.00	40.49	W
50	ATOM	9017	OH2	WAT	W	835	27.965	44.799	38.117	1.00	30.19	W
	ATOM	9018	OH2	WAT	W	836	27.787	38.780	-22.542	1.00	37.36	W
	ATOM	9019	OH2	WAT	W	837	72.305	95.801	-31.273	1.00	33.36	W
	ATOM	9020	OH2	WAT	W	838	76.326	47.087	-11.653	1.00	33.77	W
	ATOM	9021	OH2	WAT	W	839	21.477	49.084	-38.808	1.00	37.70	W
55	ATOM	9022	OH2	WAT	W	840	23.074	75.206	-30.020	1.00	36.46	W
	ATOM	9023	OH2	WAT	W	841	20.982	31.706	31.644	1.00	41.44	W
	ATOM	9024	OH2	WAT	W	842	29.441	42.198	-28.737	1.00	51.18	W
	ATOM	9025	OH2	WAT	W	843	42.659	47.355	-27.313	1.00	40.92	W
	ATOM	9026	OH2	WAT	W	844	55.868	51.887	27.288	1.00	31.92	W

5	ATOM	9027	OH2	WAT	W	845	31.328	58.787	-40.674	1.00	50.82	W
	ATOM	9028	OH2	WAT	W	846	18.450	43.148	27.316	1.00	29.94	W
	ATOM	9029	OH2	WAT	W	847	62.202	81.791	-43.971	1.00	45.83	W
	ATOM	9030	OH2	WAT	W	848	7.623	54.625	17.516	1.00	32.61	W
	ATOM	9031	OH2	WAT	W	849	18.083	41.899	25.153	1.00	37.23	W
10	ATOM	9032	OH2	WAT	W	850	27.414	82.738	5.782	1.00	42.08	W
	ATOM	9033	OH2	WAT	W	851	38.762	53.294	1.928	1.00	35.13	W
	ATOM	9034	OH2	WAT	W	852	11.930	67.467	2.674	1.00	46.11	W
	ATOM	9035	OH2	WAT	W	853	4.368	56.741	-6.545	1.00	31.50	W
	ATOM	9036	OH2	WAT	W	854	22.233	77.054	8.620	1.00	23.51	W
15	ATOM	9037	OH2	WAT	W	855	25.877	88.243	-42.821	1.00	39.96	W
	ATOM	9038	OH2	WAT	W	856	10.521	62.691	-12.058	1.00	35.57	W
	ATOM	9039	OH2	WAT	W	857	44.573	72.271	-44.611	1.00	40.66	W
	ATOM	9040	OH2	WAT	W	858	37.290	40.005	26.383	1.00	42.44	W
	ATOM	9041	OH2	WAT	W	859	23.430	89.005	-38.011	1.00	37.56	W
20	ATOM	9042	OH2	WAT	W	860	70.109	62.809	-24.295	1.00	41.47	W
	ATOM	9043	OH2	WAT	W	861	23.013	64.466	18.350	1.00	31.90	W
	ATOM	9044	OH2	WAT	W	862	67.076	38.608	-9.606	1.00	27.89	W
	ATOM	9045	OH2	WAT	W	863	65.523	87.855	-41.037	1.00	41.58	W
	ATOM	9046	OH2	WAT	W	864	13.958	43.645	28.956	1.00	43.91	W
25	ATOM	9047	OH2	WAT	W	865	13.521	48.352	1.213	1.00	37.81	W
	ATOM	9048	OH2	WAT	W	866	55.482	69.618	-38.014	1.00	38.32	W
	ATOM	9049	OH2	WAT	W	867	26.983	47.671	-23.958	1.00	34.58	W
	ATOM	9050	OH2	WAT	W	868	69.691	82.300	-33.929	1.00	31.58	W
	ATOM	9051	OH2	WAT	W	869	12.125	62.282	22.712	1.00	41.22	W
30	ATOM	9052	OH2	WAT	W	870	30.789	29.802	5.467	1.00	41.46	W
	ATOM	9053	OH2	WAT	W	871	19.363	36.418	22.415	1.00	43.26	W
	ATOM	9054	OH2	WAT	W	872	27.591	86.553	-14.741	1.00	26.30	W
	ATOM	9055	OH2	WAT	W	873	66.334	50.435	0.529	1.00	37.46	W
	ATOM	9056	OH2	WAT	W	874	28.581	64.849	14.838	1.00	19.58	W
35	ATOM	9057	OH2	WAT	W	875	52.012	60.259	28.144	1.00	32.70	W
	ATOM	9058	OH2	WAT	W	876	52.497	72.590	18.443	1.00	37.71	W
	ATOM	9059	OH2	WAT	W	877	47.030	75.056	-26.288	1.00	33.47	W
	ATOM	9060	OH2	WAT	W	878	65.356	81.557	-4.607	1.00	35.86	W
	ATOM	9061	OH2	WAT	W	879	48.561	72.320	-26.150	1.00	35.66	W
40	ATOM	9062	OH2	WAT	W	880	59.811	68.887	-38.775	1.00	39.50	W
	ATOM	9063	OH2	WAT	W	881	22.852	85.136	-16.949	1.00	40.06	W
	ATOM	9064	OH2	WAT	W	882	25.845	76.358	-38.701	1.00	38.63	W
	ATOM	9065	OH2	WAT	W	883	20.344	74.115	-29.032	1.00	47.88	W
	ATOM	9066	OH2	WAT	W	884	59.348	55.599	27.039	1.00	38.54	W
45	ATOM	9067	OH2	WAT	W	885	44.363	87.562	-15.598	1.00	46.87	W
	ATOM	9068	OH2	WAT	W	886	63.961	77.047	-40.514	1.00	35.09	W
	ATOM	9069	OH2	WAT	W	887	14.182	58.399	16.314	1.00	20.35	W
	ATOM	9070	OH2	WAT	W	888	14.005	57.801	18.961	1.00	16.96	W
	ATOM	9071	OH2	WAT	W	889	24.482	63.758	11.558	1.00	40.41	W
50	ATOM	9072	OH2	WAT	W	890	28.177	39.811	11.260	1.00	14.10	W
	ATOM	9073	OH2	WAT	W	891	28.968	82.073	-35.705	1.00	23.63	W
	ATOM	9074	OH2	WAT	W	892	12.332	55.927	-15.108	1.00	23.12	W
	ATOM	9075	OH2	WAT	W	893	81.492	67.229	-13.707	1.00	21.97	W
	ATOM	9076	OH2	WAT	W	894	58.926	58.066	0.988	1.00	25.28	W
55	ATOM	9077	OH2	WAT	W	895	49.226	68.465	6.744	1.00	21.20	W
	ATOM	9078	OH2	WAT	W	896	68.450	79.680	-28.527	1.00	24.55	W
	ATOM	9079	OH2	WAT	W	897	26.056	32.722	28.695	1.00	26.11	W
	ATOM	9080	OH2	WAT	W	898	32.819	69.547	24.596	1.00	29.62	W
	ATOM	9081	OH2	WAT	W	899	28.018	102.798	-19.150	1.00	27.36	W

5	ATOM	9137	OH2	WAT	W	955	47.521	40.270	5.969	1.00	34.52	W
	ATOM	9138	OH2	WAT	W	956	18.766	39.515	-2.957	1.00	38.68	W
	ATOM	9139	OH2	WAT	W	957	25.886	59.107	-38.846	1.00	37.93	W
	ATOM	9140	OH2	WAT	W	958	10.640	57.926	-20.969	1.00	40.59	W
	ATOM	9141	OH2	WAT	W	959	8.881	56.896	16.376	1.00	46.16	W
10	ATOM	9142	OH2	WAT	W	960	78.130	72.254	-10.221	1.00	30.28	W
	ATOM	9143	OH2	WAT	W	961	23.884	82.876	-3.966	1.00	52.89	W
	ATOM	9144	OH2	WAT	W	962	44.483	40.961	7.504	1.00	44.52	W
	ATOM	9145	OH2	WAT	W	963	35.403	62.493	33.962	1.00	31.32	W
	ATOM	9146	OH2	WAT	W	964	27.262	90.077	-31.713	1.00	39.79	W
15	ATOM	9147	OH2	WAT	W	965	74.769	77.373	-20.732	1.00	39.11	W
	ATOM	9148	OH2	WAT	W	966	49.100	42.041	8.300	1.00	33.85	W
	ATOM	9149	OH2	WAT	W	967	44.902	92.910	-25.044	1.00	36.65	W
	ATOM	9150	OH2	WAT	W	968	52.476	49.145	25.620	1.00	35.34	W
	ATOM	9151	OH2	WAT	W	969	9.649	53.663	-12.194	1.00	30.57	W
20	ATOM	9152	OH2	WAT	W	970	58.733	51.116	14.538	1.00	47.36	W
	ATOM	9153	OH2	WAT	W	971	51.884	50.452	27.694	1.00	38.68	W
	ATOM	9154	OH2	WAT	W	972	25.020	89.138	-25.139	1.00	38.86	W
	ATOM	9155	OH2	WAT	W	973	7.521	58.222	0.201	1.00	37.34	W
	ATOM	9156	OH2	WAT	W	974	11.524	58.491	19.987	1.00	37.19	W
25	ATOM	9157	OH2	WAT	W	975	18.598	60.943	-37.781	1.00	25.28	W
	ATOM	9158	OH2	WAT	W	976	46.002	60.113	-31.315	1.00	37.62	W
	ATOM	9159	OH2	WAT	W	977	5.368	57.731	6.783	1.00	33.43	W
	ATOM	9160	OH2	WAT	W	978	13.342	66.496	-11.623	1.00	59.42	W
	ATOM	9161	OH2	WAT	W	979	47.205	81.657	-17.119	1.00	33.31	W
30	ATOM	9162	OH2	WAT	W	981	29.413	65.677	12.426	1.00	21.92	W
	ATOM	9163	OH2	WAT	W	982	28.559	69.915	12.822	1.00	31.51	W
	ATOM	9164	OH2	WAT	W	983	33.312	68.983	16.916	1.00	38.02	W
	ATOM	9165	C1	NAG	C	1	58.321	45.027	12.880	1.00	46.25	C
	ATOM	9166	C2	NAG	C	1	59.553	44.726	13.744	1.00	48.64	C
35	ATOM	9167	N2	NAG	C	1	60.611	45.671	13.441	1.00	50.02	C
	ATOM	9168	C7	NAG	C	1	60.818	46.715	14.237	1.00	51.53	C
	ATOM	9169	O7	NAG	C	1	60.267	47.803	14.068	1.00	53.37	C
	ATOM	9170	C8	NAG	C	1	61.782	46.528	15.397	1.00	51.81	C
	ATOM	9171	C3	NAG	C	1	60.046	43.300	13.495	1.00	49.65	C
40	ATOM	9172	O3	NAG	C	1	61.101	42.997	14.395	1.00	50.85	C
	ATOM	9173	C4	NAG	C	1	58.905	42.304	13.689	1.00	49.25	C
	ATOM	9174	O4	NAG	C	1	59.345	40.999	13.344	1.00	50.57	C
	ATOM	9175	C5	NAG	C	1	57.716	42.702	12.810	1.00	49.13	C
	ATOM	9176	O5	NAG	C	1	57.295	44.050	13.123	1.00	47.36	C
45	ATOM	9177	C6	NAG	C	1	56.518	41.797	13.024	1.00	48.96	C
	ATOM	9178	O6	NAG	C	1	55.511	42.038	12.052	1.00	50.02	C
	ATOM	9179	C1	SWA		1	31.064	66.873	6.079	1.00	9.68	
	ATOM	9180	O1	SWA		1	31.597	68.032	5.416	1.00	11.09	
	ATOM	9181	C3	SWA		1	31.295	67.013	7.615	1.00	10.48	
50	ATOM	9182	N4	SWA		1	30.738	65.836	8.320	1.00	10.85	
	ATOM	9183	C5	SWA		1	29.276	65.603	8.133	1.00	10.14	
	ATOM	9184	C6	SWA		1	28.973	65.471	6.610	1.00	9.14	
	ATOM	9185	C2	SWA		1	29.531	66.700	5.827	1.00	9.59	
	ATOM	9186	C9	SWA		1	31.268	65.873	9.682	1.00	11.70	
55	ATOM	9187	C8	SWA		1	32.681	66.486	9.558	1.00	11.30	
	ATOM	9188	O13	SWA		1	33.681	65.511	9.836	1.00	11.34	
	ATOM	9189	C7	SWA		1	32.764	67.083	8.112	1.00	10.44	
	ATOM	9190	O11	SWA		1	33.674	66.300	7.314	1.00	10.67	
	ATOM	9191	C1	MPD	M	1	14.797	61.266	10.322	1.00	23.09	M

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[illegible]

Table 3

Structural Results: Active Site

- 5 From initial analysis of the crystal structure, based on the location of residues known to be involved in catalysis, the active site of the enzyme is located within a region composed of the following residues:

GLY	60	VAL	61	TRP	62	LYS	63	GLN	64	GLY	65
ILE	68	VAL	83	PHE	84	VAL	85	VAL	86	PRO	87
HIS	88	SER	89	HIS	90	ASN	91	ASP	92	TRP	95
ILE	110	met	124	PHE	126	ILE	127	TRP	128	ala	129
GLU	130	VAL	161	MET	167	TRP	201	ALA	202	ILE	203
ASP	204	PRO	205	PHE	206	GLY	207	HIS	208	LEU	225
ILE	226	GLN	227	ARG	228	thr	229	TYR	231	LYS	234
LEU	243	HIS	262	MET	263	MET	264	PRO	265	PHE	266
TYR	267	SER	268	TYR	269	ASP	270	ILE	271	PRO	272
HIS	273	THR	274	CYS	275	GLY	276	PRO	277	ASP	278
PRO	279	LYS	280	val	281	CYS	282	CYS	283	GLN	284
PHE	285	ASP	286	PHE	287	LYS	288	ARG	289	met	290
phe	293	gly	294	leu	295	ser	296	CYS	297	PRO	298
TRP	299	lys	300	VAL	301	PRO	302	PRO	303	leu	317
LEU	318	GLN	321	trp	322	LYS	324	LYS	325	ala	326
LEU	328	tyr	329	LEU	334	LEU	335	ile	336	PRO	337
LEU	338	GLY	339	ASP	340	ASP	341	PHE	342	ARG	343
phe	344	lys	345	GLU	349	val	352	GLN	353	arg	354
TYR	357	LEU	360	PHE	361	PHE	376	GLY	377	LEU	379
TYR	407	ALA	408	ASP	409	ARG	410	trp	415	HIS	471
ASP	472	TYR	727	ASP	874	glu	875	ARG	876	GLY	877
LEU	878										

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Residues in lower case are not identical in the human Golgi ManII sequence, though many of those are conservative substitutions. In this sphere of 15Å around the catalytic center, there are only 21 non-identities among 121 residues, indicating that the human active site will be essentially identical to that observed for the *Drosophila* structure.

15

The numbering system in this and the accompanying Figures corresponds to the protein expressed in the system described herein, not to full length ManII.

Table 4

Intermolecular Interactions at an Active Site of a Mannosidase II Swainsonine Complex.

No. of Atomic Interaction	Swainsonine Atomic Contact	Enzyme Atomic Contact	Distance Between Atomic Contacts	Atomic Interaction Property
1	O1	His 471 NE2	3.3	HB
2	N	Asp 204 OD1	2.9	HB
3	O2	Asp 341 OD2	3.4	HB
4	O2	His 90 NE2	3.1	HB
5	O2	Asp 92 OD1	2.9	HB
6	O8	Asp 472 OD1	2.53	HB
7	Ring	Phe 206 ring	3.55	VW
8	O8	Tyr 727 OH	2.6	HB
9	ring	Trp 95	3.7	VW

HB: hydrogen bond interaction

5 VW Van der Waals

Table 5

Crystallographic Refinement Statistics for the Native Drosophila Gogli Mannosidase II

```

5  >>> input coordinates: dgm12_ann_1bi.pdb
   >>> molecular structure file: dgm12gen.mtf
   >>> parameter file 1 : CNS_TOPPAR:protein_rep.param
   >>> parameter file 2 : CNS_TOPPAR:water_rep.param
   >>> parameter file 3 : CNS_TOPPAR:ion.param
10 >>> parameter file 4 : trs.par
   >>> parameter file 5 : mpdnew2.par
   >>> parameter file 6 : cis_peptide.param
   >>> parameter file 7 : CNS_TOPPAR:carbohydrate.param
   >>> reflection file= ../semethiR.cv
15 >>> spacegroup: P2(1)2(1)2(1)
   >>> cell dimensions: a= 68.865 b= 109.718 c= 138.599 alpha= 90 beta= 90
   gamma= 90
   >>> current wa= 0.311868 for target= mlf
   >>> ncs= none
20 >>> initial B-factor correction applied to fobs :
   >>> B11= 0.587 B22= -0.754 B33= 0.167
   >>> B12= 0.000 B13= 0.000 B23= 0.000
   >>> B-factor correction applied to coordinate array B: 0.088
   >>> B-correction resolution: 6.0 - 1.4
25 >>> bulk solvent: density level= 0.359928 e/A^3, B-factor= 43.085 A^2

===== summary
=====

30 resolution range: 500.0 - 1.4 A
   R-values:
   initial r= 0.2348 free_r= 0.2361
   after B-factor and/or bulk solvent correction r= 0.1931 free_r= 0.2105

35 Monitor for target "mlf" is R-value :
   working set= 0.1931 test set= 0.2105

40 luzzati coordinate error (5.0 - 1.4 A ): 0.16 A
   cross-validated luzzati coordinate error (5.0 - 1.4 A ): 0.18 A
   sigmaa coordinate error (5.0 - 1.4 A ): 0.08 A
   cross-validated sigmaa coordinate error (5.0 - 1.4 A ): 0.10 A

rmsd bonds= 0.004763 with 2 bond violations > 0.05
rmsd angles= 1.32400 with 32 angle violations > 8.0
45 rmsd dihedrals= 24.22585 with 4 angle violations > 60.0
   rmsd improper= 0.80790 with 38 angle violations > 3.0

===== B-factors
=====

50 average B-factor= 15.7963
   minimum B-factor= 4.5681
   maximum B-factor= 57.2481
   B rmsd for bonded mainchain atoms= 0.660

```

B rmsd for bonded sidechain atoms= 1.229
 B rmsd for angle mainchain atoms= 1.131
 B rmsd for angle sidechain atoms= 1.777
 current rweight= 0.22677665

5

===== diffraction data
 =====

10 reflections with $|F_{obs}|/\sigma_F < 0.0$ rejected
 reflections with $|F_{obs}| > 10000 * rms(F_{obs})$ rejected
 theoretical total number of refl. in resol. range: 206243 (100.0 %)
 number of unobserved reflections (no entry or $|F|=0$): 59797 (29.0 %)
 number of reflections rejected: 0 (0.0 %)
 total number of reflections used: 146446 (71.0 %)
 15 number of reflections in working set: 139067 (67.4 %)
 number of reflections in test set: 7379 (3.6 %)

=====> completeness

20 Test set (test = 1):

#bin	resolution range	#refl	
1	3.02 500.01	1113	0.0521
2	2.39 3.02	1042	0.0501
25 3	2.09 2.39	1048	0.0508
4	1.90 2.09	1000	0.0485
5	1.76 1.90	989	0.0482
6	1.66 1.76	822	0.0401
7	1.58 1.66	584	0.0285
30 8	1.51 1.58	419	0.0205
9	1.45 1.51	265	0.0130
10	1.40 1.45	97	0.0048

Working set:

35

#bin	resolution range	#refl	
1	3.02 500.01	20201	0.9460
2	2.39 3.02	19732	0.9491
3	2.09 2.39	19506	0.9447
40 4	1.90 2.09	19199	0.9316
5	1.76 1.90	18521	0.9019
6	1.66 1.76	15253	0.7434
7	1.58 1.66	11380	0.5551
8	1.51 1.58	8211	0.4018
45 9	1.45 1.51	5065	0.2477
10	1.40 1.45	1999	0.0980

===== R-values
 =====

50

=====> R-values with $|F_{obs}|/\sigma$ cutoff= 0.0

Test set (test = 1):

55

	#bin	resolution range		#refl	
5	1	3.02	500.01	1113	0.1999
	2	2.39	3.02	1042	0.2110
	3	2.09	2.39	1048	0.2083
	4	1.90	2.09	1000	0.2137
	5	1.76	1.90	989	0.2244
10	6	1.66	1.76	822	0.2302
	7	1.58	1.66	584	0.2275
	8	1.51	1.58	419	0.2363
	9	1.45	1.51	265	0.2186
	10	1.40	1.45	97	0.2706

Working set:

	#bin	resolution range		#refl	
15	1	3.02	500.01	20201	0.1858
	2	2.39	3.02	19732	0.1989
	3	2.09	2.39	19506	0.1935
	4	1.90	2.09	19199	0.1922
	5	1.76	1.90	18521	0.1934
20	6	1.66	1.76	15253	0.1973
	7	1.58	1.66	11380	0.1989
	8	1.51	1.58	8211	0.2067
	9	1.45	1.51	5065	0.2248
	10	1.40	1.45	1999	0.2589

===== sigmaa-values

=====

30 sigmaa calculated using cross-validated data (test set)
number of bins for sigmaa calculation= 50

	#bin	resolution range		#refl	
35	1	5.16	500.01	4426	0.9319
	2	4.09	5.16	4270	0.9576
	3	3.58	4.09	4227	0.9615
	4	3.25	3.58	4196	0.9632
	5	3.02	3.25	4195	0.9422
40	6	2.84	3.02	4177	0.9512
	7	2.70	2.84	4163	0.9369
	8	2.58	2.70	4152	0.9424
	9	2.48	2.58	4156	0.9486
	10	2.39	2.48	4126	0.9448
45	11	2.32	2.39	4131	0.9407
	12	2.25	2.32	4149	0.9498
	13	2.19	2.25	4101	0.9417
	14	2.14	2.19	4113	0.9351
	15	2.09	2.14	4060	0.9459
50	16	2.05	2.09	4096	0.9333
	17	2.01	2.05	4078	0.9552
	18	1.97	2.01	4005	0.9445
	19	1.93	1.97	4001	0.9443
	20	1.90	1.93	4019	0.9352
55	21	1.87	1.90	3971	0.9411
	22	1.84	1.87	3941	0.9319

	23	1.81	1.84	3946	0.9360
	24	1.79	1.81	3860	0.9480
	25	1.76	1.79	3792	0.9213
5	26	1.74	1.76	3632	0.9184
	27	1.72	1.74	3458	0.9382
	28	1.70	1.72	3191	0.9414
	29	1.68	1.70	2994	0.9275
	30	1.66	1.68	2800	0.9268
10	31	1.64	1.66	2678	0.9303
	32	1.62	1.64	2506	0.9388
	33	1.61	1.62	2366	0.9506
	34	1.59	1.61	2249	0.9402
	35	1.58	1.59	2165	0.9270
15	36	1.56	1.58	2006	0.9365
	37	1.55	1.56	1874	0.9184
	38	1.53	1.55	1700	0.9072
	39	1.52	1.53	1595	0.9358
	40	1.51	1.52	1455	0.9398
20	41	1.50	1.51	1336	0.9433
	42	1.48	1.50	1147	0.9541
	43	1.47	1.48	1077	0.9419
	44	1.46	1.47	962	0.9331
	45	1.45	1.46	808	0.9242
25	46	1.44	1.45	696	0.9038
	47	1.43	1.44	570	0.9371
	48	1.42	1.43	408	0.9387
	49	1.41	1.42	288	0.8914
	50	1.40	1.41	134	0.8194
30	===== non-trans peptides				
	=====				
	cis-peptide: segid=A resid=406 resname=THR				
	current dihedral value= -0.010				
35	cis-peptide: segid=A resid=532 resname=PRO				
	current dihedral value= -0.435				
40	===== occupancies				
	=====				
	no atoms have zero occupancy				

Table 6

Crystallographic Refinement Statistics for the Drosophila Golgi Mannosidase II Associated with Swainsonine

```

5  =====
   ==

   >>> input coordinates: swainsonine3_ann_lbi.pdb
   >>> molecular structure file: swainsoninegen3.mtf
10  >>> parameter file 1 : CNS_TOPPAR:protein_rep.param
   >>> parameter file 2 : CNS_TOPPAR:water_rep.param
   >>> parameter file 3 : CNS_TOPPAR:ion.param
   >>> parameter file 4 : swa.par
15  >>> parameter file 5 : ../zntrmp/mpdnew2.par
   >>> parameter file 6 : cis_peptide.param
   >>> parameter file 7 : CNS_TOPPAR:carbohydrate.param
   >>> reflection file= dgm2native_rejmerge.cv
   >>> spacegroup: P2(1)2(1)2(1)
20  >>> cell dimensions: a= 68.902 b= 110.015 c= 138.472 alpha= 90 beta= 90
   gamma= 90
   >>> current wa= 0.632464 for target= mlf
   >>> ncs= none
   >>> initial B-factor correction applied to fobs :
   >>>   B11=  0.551 B22= -0.116 B33= -0.435
25  >>>   B12=  0.000 B13=  0.000 B23=  0.000
   >>> B-factor correction applied to coordinate array B:  0.413
   >>> B-correction resolution: 6.0 - 1.87
   >>> bulk solvent: density level= 0.354131 e/A^3, B-factor= 42.2797 A^2

30  ===== summary
   =====

resolution range: 500.0 - 1.87 A
R-values:
35  initial                      r= 0.2078 free_r= 0.2371
   after B-factor and/or bulk solvent correction r= 0.1810 free_r= 0.2090

   Monitor for target "mlf" is R-value :
   working set= 0.1810 test set= 0.2090

40  luzzati coordinate error (5.0 - 1.87 A ):  0.19 A
cross-validated luzzati coordinate error (5.0 - 1.87 A ):  0.22 A
   sigmaa coordinate error (5.0 - 1.87 A ):  0.12 A
45  cross-validated sigmaa coordinate error (5.0 - 1.87 A ):  0.14 A

rmsd bonds= 0.005230 with 2 bond violations > 0.05
rmsd angles= 1.31525 with 34 angle violations > 8.0
rmsd dihedrals= 24.18605 with 4 angle violations > 60.0
rmsd improper= 0.78741 with 34 angle violations > 3.0

50  ===== B-factors
   =====

average B-factor= 19.441

```

minimum B-factor= 8.18268
 maximum B-factor= 64.5527
 B rmsd for bonded mainchain atoms= 0.699
 B rmsd for bonded sidechain atoms= 1.141
 5 B rmsd for angle mainchain atoms= 1.167
 B rmsd for angle sidechain atoms= 1.747
 current rweight= 0.18691688

===== diffraction data
 =====

reflections with $|F_{obs}|/\sigma_F < 0.0$ rejected
 reflections with $|F_{obs}| > 10000 * rms(F_{obs})$ rejected
 theoretical total number of refl. in resol. range: 87643 (100.0 %)
 15 number of unobserved reflections (no entry or $|F|=0$): 2814 (3.2 %)
 number of reflections rejected: 0 (0.0 %)
 total number of reflections used: 84829 (96.8 %)
 number of reflections in working set: 80543 (91.9 %)
 number of reflections in test set: 4286 (4.9 %)

=====> completeness

Test set (test = 1):

#bin	resolution	range	#refl	
1	4.03	500.01	452	0.0493
2	3.20	4.03	488	0.0550
3	2.79	3.20	398	0.0453
4	2.54	2.79	433	0.0496
5	2.36	2.54	460	0.0527
6	2.22	2.36	433	0.0497
7	2.11	2.22	417	0.0480
8	2.01	2.11	402	0.0464
9	1.94	2.01	406	0.0470
10	1.87	1.94	397	0.0457

Working set:

#bin	resolution	range	#refl	
1	4.03	500.01	8521	0.9298
2	3.20	4.03	8330	0.9385
3	2.79	3.20	8244	0.9391
4	2.54	2.79	8134	0.9315
5	2.36	2.54	8056	0.9234
6	2.22	2.36	8022	0.9215
7	2.11	2.22	7985	0.9196
8	2.01	2.11	7940	0.9158
9	1.94	2.01	7835	0.9077
10	1.87	1.94	7476	0.8615

===== R-values
 =====

=====> R-values with $|F_{obs}|/\sigma$ cutoff= 0.0

Test set (test = 1):

	#bin	resolution range		#refl	
5	1	4.03	500.01	452	0.2028
	2	3.20	4.03	488	0.1836
	3	2.79	3.20	398	0.2059
	4	2.54	2.79	433	0.2246
	5	2.36	2.54	460	0.2203
10	6	2.22	2.36	433	0.2125
	7	2.11	2.22	417	0.2304
	8	2.01	2.11	402	0.2066
	9	1.94	2.01	406	0.2154
15	10	1.87	1.94	397	0.2693

Working set:

	#bin	resolution range		#refl	
20	1	4.03	500.01	8521	0.1673
	2	3.20	4.03	8330	0.1704
	3	2.79	3.20	8244	0.1861
	4	2.54	2.79	8134	0.1857
	5	2.36	2.54	8056	0.1830
25	6	2.22	2.36	8022	0.1827
	7	2.11	2.22	7985	0.1894
	8	2.01	2.11	7940	0.1826
	9	1.94	2.01	7835	0.1920
	10	1.87	1.94	7476	0.2320

30 ===== sigmaa-values
=====

sigmaa calculated using cross-validated data (test set)
number of bins for sigmaa calculation= 50

	#bin	resolution range		#refl	
40	1	6.89	500.01	1778	0.9682
	2	5.47	6.89	1834	0.9324
	3	4.78	5.47	1793	0.9330
	4	4.34	4.78	1797	0.9551
	5	4.03	4.34	1771	0.9634
	6	3.79	4.03	1778	0.9700
	7	3.60	3.79	1751	0.9563
	8	3.44	3.60	1749	0.9651
45	9	3.31	3.44	1775	0.9515
	10	3.20	3.31	1765	0.9589
	11	3.10	3.20	1714	0.9433
	12	3.01	3.10	1746	0.9571
	13	2.93	3.01	1737	0.9545
50	14	2.86	2.93	1721	0.9457
	15	2.79	2.86	1724	0.9391
	16	2.73	2.79	1727	0.9327
	17	2.68	2.73	1708	0.9429
	18	2.63	2.68	1726	0.9267
55	19	2.58	2.63	1737	0.9416

	20	2.54	2.58	1669	0.9385
	21	2.50	2.54	1705	0.9257
	22	2.46	2.50	1713	0.9444
5	23	2.42	2.46	1721	0.9384
	24	2.39	2.42	1665	0.9456
	25	2.36	2.39	1712	0.9398
	26	2.33	2.36	1699	0.9427
	27	2.30	2.33	1675	0.9341
10	28	2.27	2.30	1723	0.9324
	29	2.24	2.27	1653	0.9570
	30	2.22	2.24	1705	0.9355
	31	2.19	2.22	1711	0.9093
	32	2.17	2.19	1650	0.9188
15	33	2.15	2.17	1659	0.9341
	34	2.13	2.15	1707	0.9520
	35	2.11	2.13	1675	0.9298
	36	2.09	2.11	1655	0.9446
	37	2.07	2.09	1691	0.9407
20	38	2.05	2.07	1685	0.9234
	39	2.03	2.05	1631	0.9412
	40	2.01	2.03	1680	0.9613
	41	2.00	2.01	1646	0.9423
	42	1.98	2.00	1669	0.9395
25	43	1.97	1.98	1626	0.9240
	44	1.95	1.97	1693	0.9373
	45	1.94	1.95	1607	0.9534
	46	1.92	1.94	1634	0.9255
	47	1.91	1.92	1652	0.9181
30	48	1.90	1.91	1616	0.9194
	49	1.88	1.90	1597	0.9026
	50	1.87	1.88	1374	0.8987

===== non-trans peptides
=====

35 cis-peptide: segid=A resid=406 resname=THR
current dihedral value= 0.298

40 cis-peptide: segid=A resid=532 resname=PRO
current dihedral value= -0.154

===== occupancies
=====

45 no atoms have zero occupancy

Table 7

- Glycoside Hydrolase Classification

CAZy Family Glycoside Hydrolase Family 38

Known Activities α -mannosidase (EC 3.2.1.24) (EC 3.2.1.114).

Mechanism Retaining

Catalytic
Nucleophile/Base Asp

Catalytic Proton Donor Not known

3D Structure Status Not available

Relevant Links InterPro; PFAM

Statistics CAZy(48); GenBank/GenPept (108); Swissprot (31)

Protein	Organism	EC#	GenBank / GenPept	SwissProt	PDB / 3D
α -mannosidase (MLJ15.11)	<i>Arabidopsis thaliana</i>	n.d.	AB026648 BAB01735.1 X98130 CAA66821.1 Y11767 CAA72432.1	P94078 Q96239	
ORF F2G14_70	<i>Arabidopsis thaliana</i>	n.d.	AL391146 CAC01814.1 T51440	Q9LFR0	
ORF K2A18.23	<i>Arabidopsis thaliana</i>	n.d.	AB011474 BAB10420.1		
ORF MAC12.5	<i>Arabidopsis thaliana</i>	n.d.	AB005230 BAB11126.1		
α -mannosidase	<i>Aspergillus nidulans</i>	n.d.	AF016850 AAB70514.1	O13344	
α -mannosidase (lysosomal)	<i>Bos taurus</i>	3.2.1.24	L31373 AAB67726.1 U97686 AAC48763.1 U97687 AAC48763.1 U97688 AAC48763.1 U97689 AAC48763.1 U97690 AAC48763.1 U97691 AAC48763.1 U97692 AAC48763.1 U97693 AAC48763.1 U97694 AAC48763.1	Q29451 O02848 O19138	
ORF F48C1.1	<i>Caenorhabditis elegans</i>	n.d.	U97015 AAB52345.1	O01574	
ORF F55D10.1	<i>Caenorhabditis elegans</i>	n.d.	U40948 AAA81731.1	Q20829	
ORF F58H1.1	<i>Caenorhabditis elegans</i>	n.d.	Z75954 CAB00104.1	Q21010	
α -mannosidase	<i>Canavalia ensiformis</i>	3.2.1.24			
α -mannosidase	<i>Dictyostelium discoideum</i>	3.2.1.114	M82822 AAA33224.1	P34098	
α -mannosidase (α -Man-IIb)	<i>Drosophila melanogaster</i>	3.2.1.114	AE003710 AAF55228.1 AB018079 BAA75817.1		
α -mannosidase 2 (α -Man-II) (CG18474)	<i>Drosophila melanogaster</i>	3.2.1.114	AE003682 AAF54375.1 AE003682 AAF54376.1 AJ132715 CAA10755.1 X77652 CAA54732.1	Q24451	
ORF BcDNA.GH02419	<i>Drosophila melanogaster</i>	n.d.	AF145601 AAD38576.1 AE003628 AAF52958.1		
ORF CG5322	<i>Drosophila melanogaster</i>	n.d.	AE003628 AAF52957.1		
ORF CG9463	<i>Drosophila melanogaster</i>	n.d.	AE003622 AAF52708.1		
ORF CG9465	<i>Drosophila melanogaster</i>	n.d.	AE003622 AAF52709.1		
ORF CG9466	<i>Drosophila melanogaster</i>	n.d.	AE003622 AAF52710.1		
ORF CG9468	<i>Drosophila melanogaster</i>	n.d.	AE003622 AAF52711.1		

ORF YbgB	<i>Escherichia coli</i> K12	n.d.	D90713 BAA35398.1	
ORF YbgG	<i>Escherichia coli</i> K12 / MG1655	n.d.	AE000176 AAC73826.1	P54746 P75753
α -mannosidase (lysosomal)	<i>Felis catus</i>	3.2.1.24	AF010191 AAB97672.1 AF010192 AAB97733.1	O46432
α -mannosidase	<i>Homo sapiens</i>	3.2.1.114	U31520 AAC50302.1 D63998 BAA10017.1	Q16706 Q16767
α -mannosidase	<i>Homo sapiens</i>	n.d.	U37248 AAC00568.1	Q13358
α -mannosidase (lysosomal)	<i>Homo sapiens</i>	3.2.1.24	U05572 AAB03816.1 U60266 AAC34130.1 U68567 AAC50812.1 U60885 AAC51362.1 U60886 AAC51362.1 U60887 AAC51362.1 U60888 AAC51362.1 U60889 AAC51362.1 U60890 AAC51362.1 U60891 AAC51362.1 U60892 AAC51362.1 U60893 AAC51362.1 U60894 AAC51362.1 U60895 AAC51362.1 U60896 AAC51362.1 U60897 AAC51362.1 U60898 AAC51362.1 U60899 AAC51362.1	O00754 Q93094 Q16680 O15330
α -mannosidase (lysosomal)	<i>Homo sapiens</i>	3.2.1.24	U68382 AAC50811.1	Q93093
α -mannosidase 2	<i>Homo sapiens</i>	3.2.1.114	L28621 AAA92022.1 D55649 BAA09510.1	P49641 Q13754
α -mannosidase 6A8B	<i>Homo sapiens</i>	n.d.	AF044414 AAC00190.1	
ORF DKFZp434D175	<i>Homo sapiens</i>	n.d.	AL136876 CAB66810.1 T46931	
ORF KIAA0935	<i>Homo sapiens</i>	n.d.	AB023152 BAA76779.1	
α -mannosidase	<i>Mus musculus</i>	3.2.1.24	AB006458 BAA24266.1	O54782
α -mannosidase (lysosomal)	<i>Mus musculus</i>	3.2.1.24	U87240 AAC09470.1 U29947 AAC53369.1	O09159 Q64443
α -mannosidase (lysosomal)	<i>Mus musculus</i>	3.2.1.24	NM_010764 6754622 AF044174 AAC78560.1 AF044175 AAC78560.1 AF044176 AAC78560.1 AF044177 AAC78560.1 AF044178 AAC78560.1 AF044179 AAC78560.1 AF044180 AAC78560.1 AF044181 AAC78560.1 AF044182 AAC78560.1 AF044183 AAC78560.1 AF044184 AAC78560.1 AF044185 AAC78560.1 AF044186 AAC78560.1 AF044187 AAC78560.1 AF044188 AAC78560.1 AF044189 AAC78560.1 AF044190 AAC78560.1 AF044191 AAC78560.1 AF044192 AAC78560.1	O55037
α -mannosidase 2	<i>Mus musculus</i>	3.2.1.114	X61172 CAA43480.1	P27046
α -mannosidase IIX	<i>Mus musculus</i>	n.d.	AF107018 AAD20813.1	
ORF Rv0648	<i>Mycobacterium tuberculosis</i> H37Rv	n.d.	Z92772 CAB07105.1	P96937
ORF PH0835	<i>Pyrococcus horikoshii</i>	n.d.	AP000003 BAA29929.1	O58565
α -mannosidase 1	<i>Rattus norvegicus</i>	3.2.1.24	M57547 AAA41565.1	P21139

α -mannosidase 2	<i>Rattus norvegicus</i>	3.2.1.114	M24353 AAA66457.1	P28494
α -mannosidas	<i>Saccharomyces cerevisiae</i>	3.2.1.24	M27809 AAA34423.1 M29146 AAA34423.1 Z48618 CAA88536.1 Z72678 CAA96868.1	P22855
ORF SPAC513.05	<i>Schizosaccharomyces pombe</i>	n.d.	AL122032 CAB58728.1	
α -mannosidase II	<i>Spodoptera frugiperda</i>	n.d.	AF005034 AAB62719.1	O18497
ORF SCM11.03c	<i>Streptomyces coelicolor A3(2)</i>	n.d.	AL133278 CAB61914.1	
α -mannosidase	<i>Sus scrofa</i>	3.2.1.24	D28521 BAA05877.1	Q28949
ORF slr0323 (Ams1)	<i>Synechocystis sp.</i>	n.d.	D63999 BAA10023.1	Q55528
ORF TM1231	<i>Thermotoga maritima</i>	n.d.	AE001779 AAD36306.1	Q9X0V8
ORF TM1851	<i>Thermotoga maritima</i>	n.d.	AE001822 AAD36913.1	Q9X2G6
α -mannosidase 1	<i>Zea mays</i>	3.2.1.-	D30744 BAA06405.1	Q43249

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Table 8

5	ATOM	1	N	CYS	A	31	44.192	36.201	-18.860	1.00	0.00	N
	ATOM	2	CA	CYS	A	31	43.432	37.453	-18.569	1.00	0.00	C
	ATOM	3	C	CYS	A	31	41.925	37.255	-18.672	1.00	0.00	C
	ATOM	4	O	CYS	A	31	41.437	36.646	-19.622	1.00	0.00	O
	ATOM	5	CB	CYS	A	31	43.821	38.563	-19.546	1.00	0.00	C
10	ATOM	6	SG	CYS	A	31	45.504	39.239	-19.408	1.00	0.00	S
	ATOM	7	N	GLN	A	32	41.194	37.780	-17.693	1.00	0.00	N
	ATOM	8	CA	GLN	A	32	39.739	37.692	-17.702	1.00	0.00	C
	ATOM	9	C	GLN	A	32	39.199	38.594	-18.800	1.00	0.00	C
	ATOM	10	O	GLN	A	32	39.785	39.630	-19.113	1.00	0.00	O
15	ATOM	11	CB	GLN	A	32	39.146	38.164	-16.373	1.00	0.00	C
	ATOM	12	CG	GLN	A	32	39.160	37.145	-15.258	1.00	0.00	C
	ATOM	13	CD	GLN	A	32	38.246	37.549	-14.118	1.00	0.00	C
	ATOM	14	OE1	GLN	A	32	37.027	37.630	-14.285	1.00	0.00	O
	ATOM	15	NE2	GLN	A	32	38.829	37.814	-12.955	1.00	0.00	N
20	ATOM	16	N	ASP	A	33	38.079	38.196	-19.384	1.00	0.00	N
	ATOM	17	CA	ASP	A	33	37.449	38.989	-20.427	1.00	0.00	C
	ATOM	18	C	ASP	A	33	36.549	39.962	-19.668	1.00	0.00	C
	ATOM	19	O	ASP	A	33	35.610	39.545	-18.998	1.00	0.00	O
	ATOM	20	CB	ASP	A	33	36.638	38.070	-21.344	1.00	0.00	C
25	ATOM	21	CG	ASP	A	33	36.037	38.801	-22.524	1.00	0.00	C
	ATOM	22	OD1	ASP	A	33	35.788	38.143	-23.557	1.00	0.00	O
	ATOM	23	OD2	ASP	A	33	35.802	40.024	-22.416	1.00	0.00	O
	ATOM	24	N	VAL	A	34	36.844	41.255	-19.757	1.00	0.00	N
	ATOM	25	CA	VAL	A	34	36.065	42.254	-19.031	1.00	0.00	C
30	ATOM	26	C	VAL	A	34	34.893	42.824	-19.820	1.00	0.00	C
	ATOM	27	O	VAL	A	34	34.211	43.735	-19.354	1.00	0.00	O
	ATOM	28	CB	VAL	A	34	36.969	43.425	-18.568	1.00	0.00	C
	ATOM	29	CG1	VAL	A	34	38.134	42.887	-17.755	1.00	0.00	C
	ATOM	30	CG2	VAL	A	34	37.491	44.203	-19.774	1.00	0.00	C
35	ATOM	31	N	VAL	A	35	34.639	42.272	-21.001	1.00	0.00	N
	ATOM	32	CA	VAL	A	35	33.557	42.772	-21.836	1.00	0.00	C
	ATOM	33	C	VAL	A	35	32.381	41.825	-22.061	1.00	0.00	C
	ATOM	34	O	VAL	A	35	31.224	42.211	-21.898	1.00	0.00	O
	ATOM	35	CB	VAL	A	35	34.092	43.170	-23.236	1.00	0.00	C
40	ATOM	36	CG1	VAL	A	35	32.946	43.675	-24.118	1.00	0.00	C
	ATOM	37	CG2	VAL	A	35	35.181	44.222	-23.098	1.00	0.00	C
	ATOM	38	N	GLN	A	36	32.688	40.584	-22.417	1.00	0.00	N
	ATOM	39	CA	GLN	A	36	31.668	39.594	-22.768	1.00	0.00	C
	ATOM	40	C	GLN	A	36	31.067	38.670	-21.719	1.00	0.00	C
45	ATOM	41	O	GLN	A	36	30.128	37.936	-22.022	1.00	0.00	O
	ATOM	42	CB	GLN	A	36	32.208	38.745	-23.915	1.00	0.00	C
	ATOM	43	CG	GLN	A	36	32.967	39.567	-24.944	1.00	0.00	C
	ATOM	44	CD	GLN	A	36	33.436	38.744	-26.118	1.00	0.00	C
	ATOM	45	OE1	GLN	A	36	32.665	38.450	-27.029	1.00	0.00	O
50	ATOM	46	NE2	GLN	A	36	34.705	38.357	-26.100	1.00	0.00	N
	ATOM	47	N	ASP	A	37	31.592	38.681	-20.501	1.00	0.00	N
	ATOM	48	CA	ASP	A	37	31.055	37.814	-19.457	1.00	0.00	C
	ATOM	49	C	ASP	A	37	30.419	38.615	-18.328	1.00	0.00	C
	ATOM	50	O	ASP	A	37	31.123	39.192	-17.501	1.00	0.00	O
55	ATOM	51	CB	ASP	A	37	32.155	36.919	-18.869	1.00	0.00	C
	ATOM	52	CG	ASP	A	37	32.746	35.967	-19.890	1.00	0.00	C
	ATOM	53	OD1	ASP	A	37	31.969	35.306	-20.608	1.00	0.00	O
	ATOM	54	OD2	ASP	A	37	33.989	35.872	-19.964	1.00	0.00	O
	ATOM	55	N	VAL	A	38	29.091	38.641	-18.294	1.00	0.00	N
60	ATOM	56	CA	VAL	A	38	28.365	39.359	-17.252	1.00	0.00	C
	ATOM	57	C	VAL	A	38	28.525	38.640	-15.914	1.00	0.00	C
	ATOM	58	O	VAL	A	38	28.035	37.522	-15.734	1.00	0.00	O

5	ATOM	59	CB	VAL	A	38	26.863	39.454	-17.582	1.00	0.00	C
	ATOM	60	CG1	VAL	A	38	26.125	40.198	-16.470	1.00	0.00	C
	ATOM	61	CG2	VAL	A	38	26.672	40.164	-18.920	1.00	0.00	C
	ATOM	62	N	PRO	A	39	29.218	39.272	-14.957	1.00	0.00	N
	ATOM	63	CA	PRO	A	39	29.417	38.652	-13.645	1.00	0.00	C
	ATOM	64	C	PRO	A	39	28.110	38.256	-12.969	1.00	0.00	C
10	ATOM	65	O	PRO	A	39	27.101	38.954	-13.076	1.00	0.00	O
	ATOM	66	CB	PRO	A	39	30.157	39.735	-12.863	1.00	0.00	C
	ATOM	67	CG	PRO	A	39	30.953	40.428	-13.925	1.00	0.00	C
	ATOM	68	CD	PRO	A	39	29.934	40.558	-15.041	1.00	0.00	C
	ATOM	69	N	ASN	A	40	28.126	37.122	-12.278	1.00	0.00	N
	ATOM	70	CA	ASN	A	40	26.943	36.673	-11.561	1.00	0.00	C
15	ATOM	71	C	ASN	A	40	27.128	37.021	-10.091	1.00	0.00	C
	ATOM	72	O	ASN	A	40	27.913	36.385	-9.390	1.00	0.00	O
	ATOM	73	CB	ASN	A	40	26.752	35.164	-11.707	1.00	0.00	C
	ATOM	74	CG	ASN	A	40	25.582	34.652	-10.891	1.00	0.00	C
	ATOM	75	OD1	ASN	A	40	24.465	35.162	-10.999	1.00	0.00	O
	ATOM	76	ND2	ASN	A	40	25.830	33.640	-10.068	1.00	0.00	N
20	ATOM	77	N	VAL	A	41	26.411	38.038	-9.627	1.00	0.00	N
	ATOM	78	CA	VAL	A	41	26.518	38.457	-8.233	1.00	0.00	C
	ATOM	79	C	VAL	A	41	25.157	38.452	-7.549	1.00	0.00	C
	ATOM	80	O	VAL	A	41	24.120	38.549	-8.204	1.00	0.00	O
	ATOM	81	CB	VAL	A	41	27.131	39.869	-8.120	1.00	0.00	C
	ATOM	82	CG1	VAL	A	41	28.573	39.851	-8.604	1.00	0.00	C
25	ATOM	83	CG2	VAL	A	41	26.313	40.855	-8.941	1.00	0.00	C
	ATOM	84	N	ASP	A	42	25.166	38.332	-6.228	1.00	0.00	N
	ATOM	85	CA	ASP	A	42	23.928	38.315	-5.462	1.00	0.00	C
	ATOM	86	C	ASP	A	42	23.258	39.679	-5.488	1.00	0.00	C
	ATOM	87	O	ASP	A	42	22.032	39.782	-5.528	1.00	0.00	O
	ATOM	88	CB	ASP	A	42	24.210	37.904	-4.016	1.00	0.00	C
30	ATOM	89	CG	ASP	A	42	24.747	36.489	-3.909	1.00	0.00	C
	ATOM	90	OD1	ASP	A	42	24.078	35.565	-4.416	1.00	0.00	O
	ATOM	91	OD2	ASP	A	42	25.830	36.300	-3.319	1.00	0.00	O
	ATOM	92	N	VAL	A	43	24.072	40.729	-5.455	1.00	0.00	N
	ATOM	93	CA	VAL	A	43	23.564	42.091	-5.480	1.00	0.00	C
	ATOM	94	C	VAL	A	43	24.314	42.921	-6.517	1.00	0.00	C
35	ATOM	95	O	VAL	A	43	25.540	43.034	-6.466	1.00	0.00	O
	ATOM	96	CB	VAL	A	43	23.729	42.785	-4.111	1.00	0.00	C
	ATOM	97	CG1	VAL	A	43	23.136	44.192	-4.164	1.00	0.00	C
	ATOM	98	CG2	VAL	A	43	23.063	41.963	-3.017	1.00	0.00	C
	ATOM	99	N	GLN	A	44	23.576	43.479	-7.468	1.00	0.00	N
	ATOM	100	CA	GLN	A	44	24.170	44.328	-8.493	1.00	0.00	C
40	ATOM	101	C	GLN	A	44	23.410	45.642	-8.320	1.00	0.00	C
	ATOM	102	O	GLN	A	44	22.207	45.717	-8.577	1.00	0.00	O
	ATOM	103	CB	GLN	A	44	23.956	43.723	-9.884	1.00	0.00	C
	ATOM	104	CG	GLN	A	44	25.020	44.138	-10.893	1.00	0.00	C
	ATOM	105	CD	GLN	A	44	25.127	45.648	-11.011	1.00	0.00	C
	ATOM	106	OE1	GLN	A	44	24.143	46.324	-11.294	1.00	0.00	O
45	ATOM	107	NE2	GLN	A	44	26.325	46.181	-10.790	1.00	0.00	N
	ATOM	108	N	MET	A	45	24.115	46.675	-7.871	1.00	0.00	N
	ATOM	109	CA	MET	A	45	23.483	47.954	-7.577	1.00	0.00	C
	ATOM	110	C	MET	A	45	22.592	48.605	-8.632	1.00	0.00	C
	ATOM	111	O	MET	A	45	21.596	49.236	-8.278	1.00	0.00	O
	ATOM	112	CB	MET	A	45	24.535	48.947	-7.076	1.00	0.00	C
50	ATOM	113	CG	MET	A	45	25.143	48.549	-5.728	1.00	0.00	C
	ATOM	114	SD	MET	A	45	23.891	48.155	-4.467	1.00	0.00	S
	ATOM	115	CE	MET	A	45	23.316	49.800	-4.038	1.00	0.00	C
	ATOM	116	N	LEU	A	46	22.927	48.467	-9.910	1.00	0.00	N
	ATOM	117	CA	LEU	A	46	22.087	49.063	-10.949	1.00	0.00	C
	ATOM	118	C	LEU	A	46	20.770	48.286	-11.009	1.00	0.00	C
60	ATOM	119	O	LEU	A	46	19.689	48.870	-11.150	1.00	0.00	O

5	ATOM	120	CB	LEU	A	46	22.781	49.009	-12.317	1.00	0.00	C
	ATOM	121	CG	LEU	A	46	22.024	49.702	-13.459	1.00	0.00	C
	ATOM	122	CD1	LEU	A	46	22.010	51.211	-13.228	1.00	0.00	C
	ATOM	123	CD2	LEU	A	46	22.686	49.379	-14.791	1.00	0.00	C
	ATOM	124	N	GLU	A	47	20.868	46.963	-10.890	1.00	0.00	N
	ATOM	125	CA	GLU	A	47	19.683	46.112	-10.925	1.00	0.00	C
10	ATOM	126	C	GLU	A	47	18.826	46.412	-9.702	1.00	0.00	C
	ATOM	127	O	GLU	A	47	17.609	46.566	-9.807	1.00	0.00	O
	ATOM	128	CB	GLU	A	47	20.086	44.632	-10.946	1.00	0.00	C
	ATOM	129	CG	GLU	A	47	18.929	43.665	-11.196	1.00	0.00	C
	ATOM	130	CD	GLU	A	47	18.116	43.357	-9.952	1.00	0.00	C
	ATOM	131	OE1	GLU	A	47	17.007	42.796	-10.093	1.00	0.00	O
15	ATOM	132	OE2	GLU	A	47	18.582	43.657	-8.832	1.00	0.00	O
	ATOM	133	N	LEU	A	48	19.467	46.514	-8.542	1.00	0.00	N
	ATOM	134	CA	LEU	A	48	18.757	46.813	-7.302	1.00	0.00	C
	ATOM	135	C	LEU	A	48	18.022	48.144	-7.416	1.00	0.00	C
	ATOM	136	O	LEU	A	48	16.861	48.258	-7.026	1.00	0.00	O
	ATOM	137	CB	LEU	A	48	19.737	46.869	-6.125	1.00	0.00	C
20	ATOM	138	CG	LEU	A	48	19.124	47.144	-4.747	1.00	0.00	C
	ATOM	139	CD1	LEU	A	48	18.094	46.072	-4.423	1.00	0.00	C
	ATOM	140	CD2	LEU	A	48	20.216	47.174	-3.688	1.00	0.00	C
	ATOM	141	N	TYR	A	49	18.698	49.149	-7.962	1.00	0.00	N
	ATOM	142	CA	TYR	A	49	18.097	50.470	-8.120	1.00	0.00	C
	ATOM	143	C	TYR	A	49	16.855	50.421	-9.002	1.00	0.00	C
25	ATOM	144	O	TYR	A	49	15.883	51.141	-8.771	1.00	0.00	O
	ATOM	145	CB	TYR	A	49	19.126	51.449	-8.704	1.00	0.00	C
	ATOM	146	CG	TYR	A	49	19.677	52.405	-7.670	1.00	0.00	C
	ATOM	147	CD1	TYR	A	49	20.153	51.934	-6.444	1.00	0.00	C
	ATOM	148	CD2	TYR	A	49	19.672	53.783	-7.892	1.00	0.00	C
	ATOM	149	CE1	TYR	A	49	20.602	52.812	-5.458	1.00	0.00	C
30	ATOM	150	CE2	TYR	A	49	20.119	54.671	-6.913	1.00	0.00	C
	ATOM	151	CZ	TYR	A	49	20.578	54.180	-5.700	1.00	0.00	C
	ATOM	152	OH	TYR	A	49	20.977	55.057	-4.717	1.00	0.00	O
	ATOM	153	N	ASP	A	50	16.888	49.553	-10.005	1.00	0.00	N
	ATOM	154	CA	ASP	A	50	15.768	49.407	-10.925	1.00	0.00	C
	ATOM	155	C	ASP	A	50	14.532	48.872	-10.192	1.00	0.00	C
35	ATOM	156	O	ASP	A	50	13.409	49.299	-10.465	1.00	0.00	O
	ATOM	157	CB	ASP	A	50	16.158	48.452	-12.058	1.00	0.00	C
	ATOM	158	CG	ASP	A	50	15.327	48.653	-13.311	1.00	0.00	C
	ATOM	159	OD1	ASP	A	50	15.409	47.790	-14.212	1.00	0.00	O
	ATOM	160	OD2	ASP	A	50	14.609	49.672	-13.403	1.00	0.00	O
	ATOM	161	N	ARG	A	51	14.749	47.951	-9.256	1.00	0.00	N
40	ATOM	162	CA	ARG	A	51	13.660	47.333	-8.495	1.00	0.00	C
	ATOM	163	C	ARG	A	51	13.163	48.089	-7.262	1.00	0.00	C
	ATOM	164	O	ARG	A	51	11.986	48.002	-6.920	1.00	0.00	O
	ATOM	165	CB	ARG	A	51	14.057	45.914	-8.062	1.00	0.00	C
	ATOM	166	CG	ARG	A	51	14.171	44.923	-9.198	1.00	0.00	C
	ATOM	167	CD	ARG	A	51	14.347	43.487	-8.698	1.00	0.00	C
45	ATOM	168	NE	ARG	A	51	15.636	43.257	-8.047	1.00	0.00	N
	ATOM	169	CZ	ARG	A	51	15.881	43.459	-6.756	1.00	0.00	C
	ATOM	170	NH1	ARG	A	51	14.923	43.899	-5.951	1.00	0.00	N
	ATOM	171	NH2	ARG	A	51	17.092	43.219	-6.269	1.00	0.00	N
	ATOM	172	N	MET	A	52	14.050	48.818	-6.592	1.00	0.00	N
	ATOM	173	CA	MET	A	52	13.680	49.560	-5.385	1.00	0.00	C
50	ATOM	174	C	MET	A	52	12.640	50.646	-5.618	1.00	0.00	C
	ATOM	175	O	MET	A	52	12.600	51.260	-6.684	1.00	0.00	O
	ATOM	176	CB	MET	A	52	14.923	50.187	-4.754	1.00	0.00	C
	ATOM	177	CG	MET	A	52	15.887	49.188	-4.155	1.00	0.00	C
	ATOM	178	SD	MET	A	52	17.401	50.006	-3.610	1.00	0.00	S
	ATOM	179	CE	MET	A	52	16.765	51.029	-2.290	1.00	0.00	C
60	ATOM	180	N	SER	A	53	11.811	50.891	-4.605	1.00	0.00	N

5	ATOM	181	CA	SER	A	53	10.762	51.903	-4.696	1.00	0.00	C
	ATOM	182	C	SER	A	53	11.154	53.233	-4.054	1.00	0.00	C
	ATOM	183	O	SER	A	53	10.522	54.260	-4.301	1.00	0.00	O
	ATOM	184	CB	SER	A	53	9.476	51.380	-4.049	1.00	0.00	C
	ATOM	185	OG	SER	A	53	8.986	50.248	-4.749	1.00	0.00	O
10	ATOM	186	N	PHE	A	54	12.189	53.202	-3.220	1.00	0.00	N
	ATOM	187	CA	PHE	A	54	12.689	54.396	-2.542	1.00	0.00	C
	ATOM	188	C	PHE	A	54	11.648	55.183	-1.749	1.00	0.00	C
	ATOM	189	O	PHE	A	54	11.735	56.409	-1.656	1.00	0.00	O
	ATOM	190	CB	PHE	A	54	13.356	55.342	-3.549	1.00	0.00	C
15	ATOM	191	CG	PHE	A	54	14.604	54.786	-4.178	1.00	0.00	C
	ATOM	192	CD1	PHE	A	54	14.528	53.915	-5.262	1.00	0.00	C
	ATOM	193	CD2	PHE	A	54	15.855	55.131	-3.681	1.00	0.00	C
	ATOM	194	CE1	PHE	A	54	15.682	53.394	-5.843	1.00	0.00	C
	ATOM	195	CE2	PHE	A	54	17.019	54.617	-4.250	1.00	0.00	C
20	ATOM	196	CZ	PHE	A	54	16.935	53.746	-5.334	1.00	0.00	C
	ATOM	197	N	LYS	A	55	10.668	54.498	-1.170	1.00	0.00	N
	ATOM	198	CA	LYS	A	55	9.657	55.203	-0.390	1.00	0.00	C
	ATOM	199	C	LYS	A	55	10.267	55.646	0.934	1.00	0.00	C
	ATOM	200	O	LYS	A	55	10.922	54.863	1.617	1.00	0.00	O
25	ATOM	201	CB	LYS	A	55	8.442	54.305	-0.139	1.00	0.00	C
	ATOM	202	CG	LYS	A	55	7.755	53.841	-1.410	1.00	0.00	C
	ATOM	203	CD	LYS	A	55	7.334	55.014	-2.285	1.00	0.00	C
	ATOM	204	CE	LYS	A	55	6.694	54.526	-3.578	1.00	0.00	C
	ATOM	205	NZ	LYS	A	55	6.200	55.652	-4.420	1.00	0.00	N
30	ATOM	206	N	ASP	A	56	10.048	56.907	1.286	1.00	0.00	N
	ATOM	207	CA	ASP	A	56	10.584	57.476	2.515	1.00	0.00	C
	ATOM	208	C	ASP	A	56	9.524	57.491	3.618	1.00	0.00	C
	ATOM	209	O	ASP	A	56	8.964	58.535	3.942	1.00	0.00	O
	ATOM	210	CB	ASP	A	56	11.093	58.895	2.224	1.00	0.00	C
35	ATOM	211	CG	ASP	A	56	11.696	59.569	3.438	1.00	0.00	C
	ATOM	212	OD1	ASP	A	56	12.224	58.863	4.320	1.00	0.00	O
	ATOM	213	OD2	ASP	A	56	11.654	60.815	3.502	1.00	0.00	O
	ATOM	214	N	ILE	A	57	9.250	56.327	4.198	1.00	0.00	N
	ATOM	215	CA	ILE	A	57	8.247	56.245	5.252	1.00	0.00	C
40	ATOM	216	C	ILE	A	57	8.873	56.247	6.640	1.00	0.00	C
	ATOM	217	O	ILE	A	57	10.031	55.868	6.814	1.00	0.00	O
	ATOM	218	CB	ILE	A	57	7.371	54.976	5.110	1.00	0.00	C
	ATOM	219	CG1	ILE	A	57	8.178	53.733	5.479	1.00	0.00	C
	ATOM	220	CG2	ILE	A	57	6.855	54.854	3.679	1.00	0.00	C
45	ATOM	221	CD1	ILE	A	57	7.348	52.469	5.538	1.00	0.00	C
	ATOM	222	N	ASP	A	58	8.091	56.683	7.622	1.00	0.00	N
	ATOM	223	CA	ASP	A	58	8.527	56.744	9.013	1.00	0.00	C
	ATOM	224	C	ASP	A	58	8.552	55.333	9.595	1.00	0.00	C
	ATOM	225	O	ASP	A	58	7.504	54.718	9.787	1.00	0.00	O
50	ATOM	226	CB	ASP	A	58	7.562	57.627	9.809	1.00	0.00	C
	ATOM	227	CG	ASP	A	58	7.981	57.808	11.257	1.00	0.00	C
	ATOM	228	OD1	ASP	A	58	7.386	58.671	11.938	1.00	0.00	O
	ATOM	229	OD2	ASP	A	58	8.892	57.094	11.723	1.00	0.00	O
	ATOM	230	N	GLY	A	59	9.749	54.825	9.876	1.00	0.00	N
55	ATOM	231	CA	GLY	A	59	9.871	53.482	10.418	1.00	0.00	C
	ATOM	232	C	GLY	A	59	9.835	53.393	11.933	1.00	0.00	C
	ATOM	233	O	GLY	A	59	10.035	52.318	12.497	1.00	0.00	O
	ATOM	234	N	GLY	A	60	9.576	54.516	12.595	1.00	0.00	N
	ATOM	235	CA	GLY	A	60	9.527	54.525	14.048	1.00	0.00	C
60	ATOM	236	C	GLY	A	60	10.794	55.129	14.623	1.00	0.00	C
	ATOM	237	O	GLY	A	60	11.352	56.059	14.041	1.00	0.00	O
	ATOM	238	N	VAL	A	61	11.261	54.611	15.756	1.00	0.00	N
	ATOM	239	CA	VAL	A	61	12.481	55.143	16.353	1.00	0.00	C
	ATOM	240	C	VAL	A	61	13.608	55.074	15.323	1.00	0.00	C
	ATOM	241	O	VAL	A	61	14.432	55.985	15.240	1.00	0.00	O

5	ATOM	242	CB	VAL	A	61	12.861	54.396	17.657	1.00	0.00	C
	ATOM	243	CG1	VAL	A	61	11.816	54.694	18.731	1.00	0.00	C
	ATOM	244	CG2	VAL	A	61	12.957	52.900	17.413	1.00	0.00	C
	ATOM	245	N	TRP	A	62	13.652	53.995	14.545	1.00	0.00	N
	ATOM	246	CA	TRP	A	62	14.643	53.904	13.477	1.00	0.00	C
10	ATOM	247	C	TRP	A	62	13.855	54.516	12.326	1.00	0.00	C
	ATOM	248	O	TRP	A	62	13.198	53.816	11.552	1.00	0.00	O
	ATOM	249	CB	TRP	A	62	15.022	52.450	13.165	1.00	0.00	C
	ATOM	250	CG	TRP	A	62	15.979	52.328	11.998	1.00	0.00	C
	ATOM	251	CD1	TRP	A	62	16.663	53.346	11.388	1.00	0.00	C
15	ATOM	252	CD2	TRP	A	62	16.332	51.131	11.290	1.00	0.00	C
	ATOM	253	NE1	TRP	A	62	17.412	52.859	10.343	1.00	0.00	N
	ATOM	254	CE2	TRP	A	62	17.230	51.503	10.260	1.00	0.00	C
	ATOM	255	CE3	TRP	A	62	15.978	49.781	11.423	1.00	0.00	C
	ATOM	256	CZ2	TRP	A	62	17.776	50.573	9.368	1.00	0.00	C
20	ATOM	257	CZ3	TRP	A	62	16.520	48.855	10.537	1.00	0.00	C
	ATOM	258	CH2	TRP	A	62	17.412	49.257	9.520	1.00	0.00	C
	ATOM	259	N	LYS	A	63	13.909	55.841	12.245	1.00	0.00	N
	ATOM	260	CA	LYS	A	63	13.164	56.598	11.245	1.00	0.00	C
	ATOM	261	C	LYS	A	63	13.183	56.106	9.802	1.00	0.00	C
25	ATOM	262	O	LYS	A	63	12.177	56.219	9.094	1.00	0.00	O
	ATOM	263	CB	LYS	A	63	13.595	58.067	11.290	1.00	0.00	C
	ATOM	264	CG	LYS	A	63	13.127	58.819	12.543	1.00	0.00	C
	ATOM	265	CD	LYS	A	63	11.605	58.967	12.572	1.00	0.00	C
	ATOM	266	CE	LYS	A	63	11.120	59.794	13.759	1.00	0.00	C
30	ATOM	267	NZ	LYS	A	63	11.458	59.205	15.096	1.00	0.00	N
	ATOM	268	N	GLN	A	64	14.305	55.556	9.358	1.00	0.00	N
	ATOM	269	CA	GLN	A	64	14.401	55.101	7.976	1.00	0.00	C
	ATOM	270	C	GLN	A	64	14.460	53.584	7.816	1.00	0.00	C
	ATOM	271	O	GLN	A	64	14.836	53.071	6.758	1.00	0.00	O
35	ATOM	272	CB	GLN	A	64	15.612	55.766	7.320	1.00	0.00	C
	ATOM	273	CG	GLN	A	64	15.512	57.283	7.347	1.00	0.00	C
	ATOM	274	CD	GLN	A	64	16.853	57.968	7.160	1.00	0.00	C
	ATOM	275	OE1	GLN	A	64	17.819	57.669	7.868	1.00	0.00	O
	ATOM	276	NE2	GLN	A	64	16.917	58.896	6.210	1.00	0.00	N
40	ATOM	277	N	GLY	A	65	14.071	52.878	8.873	1.00	0.00	N
	ATOM	278	CA	GLY	A	65	14.060	51.428	8.843	1.00	0.00	C
	ATOM	279	C	GLY	A	65	12.713	50.880	9.283	1.00	0.00	C
	ATOM	280	O	GLY	A	65	11.680	51.204	8.692	1.00	0.00	O
	ATOM	281	N	TRP	A	66	12.723	50.053	10.323	1.00	0.00	N
45	ATOM	282	CA	TRP	A	66	11.497	49.453	10.849	1.00	0.00	C
	ATOM	283	C	TRP	A	66	11.768	49.023	12.285	1.00	0.00	C
	ATOM	284	O	TRP	A	66	12.907	49.101	12.745	1.00	0.00	O
	ATOM	285	CB	TRP	A	66	11.104	48.234	10.005	1.00	0.00	C
	ATOM	286	CG	TRP	A	66	12.026	47.046	10.174	1.00	0.00	C
50	ATOM	287	CD1	TRP	A	66	11.895	46.027	11.075	1.00	0.00	C
	ATOM	288	CD2	TRP	A	66	13.225	46.775	9.437	1.00	0.00	C
	ATOM	289	NE1	TRP	A	66	12.934	45.137	10.944	1.00	0.00	N
	ATOM	290	CE2	TRP	A	66	13.767	45.571	9.947	1.00	0.00	C
	ATOM	291	CE3	TRP	A	66	13.896	47.432	8.395	1.00	0.00	C
55	ATOM	292	CZ2	TRP	A	66	14.950	45.009	9.450	1.00	0.00	C
	ATOM	293	CZ3	TRP	A	66	15.073	46.874	7.901	1.00	0.00	C
	ATOM	294	CH2	TRP	A	66	15.588	45.672	8.431	1.00	0.00	C
	ATOM	295	N	ASN	A	67	10.732	48.581	12.996	1.00	0.00	N
	ATOM	296	CA	ASN	A	67	10.908	48.128	14.375	1.00	0.00	C
60	ATOM	297	C	ASN	A	67	11.532	46.739	14.363	1.00	0.00	C
	ATOM	298	O	ASN	A	67	10.861	45.746	14.070	1.00	0.00	O
	ATOM	299	CB	ASN	A	67	9.568	48.080	15.120	1.00	0.00	C
	ATOM	300	CG	ASN	A	67	8.998	49.458	15.390	1.00	0.00	C
	ATOM	301	OD1	ASN	A	67	9.736	50.406	15.663	1.00	0.00	O
	ATOM	302	ND2	ASN	A	67	7.676	49.572	15.337	1.00	0.00	N

5	ATOM	303	N	ILE	A	68	12.818	46.669	14.684	1.00	0.00	N
	ATOM	304	CA	ILE	A	68	13.524	45.397	14.683	1.00	0.00	C
	ATOM	305	C	ILE	A	68	13.074	44.490	15.822	1.00	0.00	C
	ATOM	306	O	ILE	A	68	12.961	44.922	16.968	1.00	0.00	O
	ATOM	307	CB	ILE	A	68	15.046	45.608	14.799	1.00	0.00	C
10	ATOM	308	CG1	ILE	A	68	15.540	46.496	13.651	1.00	0.00	C
	ATOM	309	CG2	ILE	A	68	15.757	44.265	14.772	1.00	0.00	C
	ATOM	310	CD1	ILE	A	68	16.994	46.917	13.781	1.00	0.00	C
	ATOM	311	N	LYS	A	69	12.820	43.229	15.489	1.00	0.00	N
	ATOM	312	CA	LYS	A	69	12.402	42.239	16.474	1.00	0.00	C
15	ATOM	313	C	LYS	A	69	13.403	41.090	16.443	1.00	0.00	C
	ATOM	314	O	LYS	A	69	13.979	40.791	15.399	1.00	0.00	O
	ATOM	315	CB	LYS	A	69	10.993	41.725	16.151	1.00	0.00	C
	ATOM	316	CG	LYS	A	69	9.909	42.788	16.298	1.00	0.00	C
	ATOM	317	CD	LYS	A	69	8.531	42.278	15.885	1.00	0.00	C
20	ATOM	318	CE	LYS	A	69	8.478	41.927	14.402	1.00	0.00	C
	ATOM	319	NZ	LYS	A	69	7.079	41.678	13.933	1.00	0.00	N
	ATOM	320	N	TYR	A	70	13.622	40.458	17.590	1.00	0.00	N
	ATOM	321	CA	TYR	A	70	14.556	39.344	17.658	1.00	0.00	C
	ATOM	322	C	TYR	A	70	14.071	38.289	18.641	1.00	0.00	C
25	ATOM	323	O	TYR	A	70	13.309	38.584	19.563	1.00	0.00	O
	ATOM	324	CB	TYR	A	70	15.952	39.840	18.063	1.00	0.00	C
	ATOM	325	CG	TYR	A	70	16.034	40.442	19.449	1.00	0.00	C
	ATOM	326	CD1	TYR	A	70	16.268	39.643	20.569	1.00	0.00	C
	ATOM	327	CD2	TYR	A	70	15.859	41.810	19.645	1.00	0.00	C
30	ATOM	328	CE1	TYR	A	70	16.326	40.194	21.846	1.00	0.00	C
	ATOM	329	CE2	TYR	A	70	15.912	42.369	20.914	1.00	0.00	C
	ATOM	330	CZ	TYR	A	70	16.145	41.558	22.010	1.00	0.00	C
	ATOM	331	OH	TYR	A	70	16.181	42.115	23.268	1.00	0.00	O
	ATOM	332	N	ASP	A	71	14.507	37.055	18.423	1.00	0.00	N
35	ATOM	333	CA	ASP	A	71	14.141	35.949	19.293	1.00	0.00	C
	ATOM	334	C	ASP	A	71	15.173	35.882	20.413	1.00	0.00	C
	ATOM	335	O	ASP	A	71	16.334	35.555	20.179	1.00	0.00	O
	ATOM	336	CB	ASP	A	71	14.124	34.644	18.494	1.00	0.00	C
	ATOM	337	CG	ASP	A	71	13.869	33.427	19.361	1.00	0.00	C
40	ATOM	338	OD1	ASP	A	71	13.391	33.590	20.503	1.00	0.00	O
	ATOM	339	OD2	ASP	A	71	14.142	32.303	18.890	1.00	0.00	O
	ATOM	340	N	PRO	A	72	14.762	36.203	21.649	1.00	0.00	N
	ATOM	341	CA	PRO	A	72	15.688	36.172	22.785	1.00	0.00	C
	ATOM	342	C	PRO	A	72	16.436	34.852	22.951	1.00	0.00	C
45	ATOM	343	O	PRO	A	72	17.546	34.824	23.486	1.00	0.00	O
	ATOM	344	CB	PRO	A	72	14.786	36.499	23.978	1.00	0.00	C
	ATOM	345	CG	PRO	A	72	13.441	36.007	23.541	1.00	0.00	C
	ATOM	346	CD	PRO	A	72	13.386	36.462	22.103	1.00	0.00	C
	ATOM	347	N	LEU	A	73	15.840	33.764	22.475	1.00	0.00	N
50	ATOM	348	CA	LEU	A	73	16.466	32.453	22.591	1.00	0.00	C
	ATOM	349	C	LEU	A	73	17.534	32.200	21.533	1.00	0.00	C
	ATOM	350	O	LEU	A	73	18.181	31.155	21.537	1.00	0.00	O
	ATOM	351	CB	LEU	A	73	15.405	31.353	22.523	1.00	0.00	C
	ATOM	352	CG	LEU	A	73	14.411	31.339	23.687	1.00	0.00	C
55	ATOM	353	CD1	LEU	A	73	13.407	30.215	23.488	1.00	0.00	C
	ATOM	354	CD2	LEU	A	73	15.163	31.163	25.001	1.00	0.00	C
	ATOM	355	N	LYS	A	74	17.724	33.156	20.630	1.00	0.00	N
	ATOM	356	CA	LYS	A	74	18.726	33.006	19.581	1.00	0.00	C
	ATOM	357	C	LYS	A	74	20.113	32.816	20.190	1.00	0.00	C
60	ATOM	358	O	LYS	A	74	20.911	32.012	19.710	1.00	0.00	O
	ATOM	359	CB	LYS	A	74	18.726	34.233	18.670	1.00	0.00	C
	ATOM	360	CG	LYS	A	74	19.676	34.126	17.489	1.00	0.00	C
	ATOM	361	CD	LYS	A	74	19.504	35.299	16.540	1.00	0.00	C
	ATOM	362	CE	LYS	A	74	20.369	35.138	15.303	1.00	0.00	C
	ATOM	363	NZ	LYS	A	74	20.181	36.267	14.350	1.00	0.00	N

5	ATOM	364	N	TYR	A	75	20.395	33.562	21.250	1.00	0.00	N
	ATOM	365	CA	TYR	A	75	21.683	33.466	21.919	1.00	0.00	C
	ATOM	366	C	TYR	A	75	21.537	32.733	23.247	1.00	0.00	C
	ATOM	367	O	TYR	A	75	20.536	32.892	23.944	1.00	0.00	O
	ATOM	368	CB	TYR	A	75	22.270	34.865	22.138	1.00	0.00	C
10	ATOM	369	CG	TYR	A	75	22.564	35.588	20.841	1.00	0.00	C
	ATOM	370	CD1	TYR	A	75	21.688	36.549	20.333	1.00	0.00	C
	ATOM	371	CD2	TYR	A	75	23.689	35.261	20.087	1.00	0.00	C
	ATOM	372	CE1	TYR	A	75	21.926	37.164	19.100	1.00	0.00	C
	ATOM	373	CE2	TYR	A	75	23.934	35.865	18.856	1.00	0.00	C
15	ATOM	374	CZ	TYR	A	75	23.049	36.812	18.368	1.00	0.00	C
	ATOM	375	OH	TYR	A	75	23.288	37.383	17.137	1.00	0.00	O
	ATOM	376	N	ASN	A	76	22.532	31.916	23.579	1.00	0.00	N
	ATOM	377	CA	ASN	A	76	22.523	31.153	24.822	1.00	0.00	C
	ATOM	378	C	ASN	A	76	23.951	30.797	25.225	1.00	0.00	C
20	ATOM	379	O	ASN	A	76	24.907	31.191	24.560	1.00	0.00	O
	ATOM	380	CB	ASN	A	76	21.699	29.873	24.662	1.00	0.00	C
	ATOM	381	CG	ASN	A	76	22.393	28.837	23.806	1.00	0.00	C
	ATOM	382	OD1	ASN	A	76	22.669	29.070	22.633	1.00	0.00	O
	ATOM	383	ND2	ASN	A	76	22.681	27.680	24.393	1.00	0.00	N
25	ATOM	384	N	ALA	A	77	24.086	30.042	26.312	1.00	0.00	N
	ATOM	385	CA	ALA	A	77	25.396	29.645	26.818	1.00	0.00	C
	ATOM	386	C	ALA	A	77	26.311	29.029	25.761	1.00	0.00	C
	ATOM	387	O	ALA	A	77	27.532	29.175	25.830	1.00	0.00	O
	ATOM	388	CB	ALA	A	77	25.226	28.673	27.981	1.00	0.00	C
30	ATOM	389	N	HIS	A	78	25.725	28.348	24.784	1.00	0.00	N
	ATOM	390	CA	HIS	A	78	26.512	27.701	23.738	1.00	0.00	C
	ATOM	391	C	HIS	A	78	26.693	28.573	22.501	1.00	0.00	C
	ATOM	392	O	HIS	A	78	27.455	28.229	21.597	1.00	0.00	O
	ATOM	393	CB	HIS	A	78	25.854	26.376	23.343	1.00	0.00	C
35	ATOM	394	CG	HIS	A	78	25.590	25.467	24.502	1.00	0.00	C
	ATOM	395	ND1	HIS	A	78	26.591	25.016	25.336	1.00	0.00	N
	ATOM	396	CD2	HIS	A	78	24.438	24.936	24.974	1.00	0.00	C
	ATOM	397	CE1	HIS	A	78	26.066	24.246	26.273	1.00	0.00	C
	ATOM	398	NE2	HIS	A	78	24.761	24.181	26.076	1.00	0.00	N
40	ATOM	399	N	HIS	A	79	25.996	29.703	22.468	1.00	0.00	N
	ATOM	400	CA	HIS	A	79	26.075	30.618	21.336	1.00	0.00	C
	ATOM	401	C	HIS	A	79	25.850	32.051	21.821	1.00	0.00	C
	ATOM	402	O	HIS	A	79	24.728	32.551	21.816	1.00	0.00	O
	ATOM	403	CB	HIS	A	79	25.024	30.222	20.293	1.00	0.00	C
45	ATOM	404	CG	HIS	A	79	25.102	31.005	19.020	1.00	0.00	C
	ATOM	405	ND1	HIS	A	79	24.295	32.092	18.763	1.00	0.00	N
	ATOM	406	CD2	HIS	A	79	25.902	30.865	17.937	1.00	0.00	C
	ATOM	407	CE1	HIS	A	79	24.595	32.588	17.575	1.00	0.00	C
	ATOM	408	NE2	HIS	A	79	25.567	31.862	17.054	1.00	0.00	N
50	ATOM	409	N	LYS	A	80	26.932	32.699	22.244	1.00	0.00	N
	ATOM	410	CA	LYS	A	80	26.869	34.063	22.758	1.00	0.00	C
	ATOM	411	C	LYS	A	80	27.123	35.126	21.695	1.00	0.00	C
	ATOM	412	O	LYS	A	80	27.749	34.859	20.667	1.00	0.00	O
	ATOM	413	CB	LYS	A	80	27.900	34.256	23.872	1.00	0.00	C
55	ATOM	414	CG	LYS	A	80	27.779	33.296	25.048	1.00	0.00	C
	ATOM	415	CD	LYS	A	80	28.847	33.614	26.085	1.00	0.00	C
	ATOM	416	CE	LYS	A	80	28.795	32.656	27.266	1.00	0.00	C
	ATOM	417	NZ	LYS	A	80	29.862	32.967	28.268	1.00	0.00	N
	ATOM	418	N	LEU	A	81	26.633	36.334	21.963	1.00	0.00	N
60	ATOM	419	CA	LEU	A	81	26.823	37.470	21.069	1.00	0.00	C
	ATOM	420	C	LEU	A	81	28.096	38.173	21.528	1.00	0.00	C
	ATOM	421	O	LEU	A	81	28.169	38.662	22.656	1.00	0.00	O
	ATOM	422	CB	LEU	A	81	25.637	38.439	21.167	1.00	0.00	C
	ATOM	423	CG	LEU	A	81	25.716	39.700	20.296	1.00	0.00	C
	ATOM	424	CD1	LEU	A	81	25.677	39.308	18.820	1.00	0.00	C

5	ATOM	425	CD2	LEU	A	81	24.561	40.635	20.625	1.00	0.00	C
	ATOM	426	N	LYS	A	82	29.104	38.193	20.663	1.00	0.00	N
	ATOM	427	CA	LYS	A	82	30.376	38.840	20.973	1.00	0.00	C
	ATOM	428	C	LYS	A	82	30.281	40.287	20.512	1.00	0.00	C
	ATOM	429	O	LYS	A	82	30.109	40.553	19.323	1.00	0.00	O
10	ATOM	430	CB	LYS	A	82	31.519	38.128	20.243	1.00	0.00	C
	ATOM	431	CG	LYS	A	82	31.750	36.697	20.717	1.00	0.00	C
	ATOM	432	CD	LYS	A	82	32.635	35.903	19.758	1.00	0.00	C
	ATOM	433	CE	LYS	A	82	34.048	36.457	19.683	1.00	0.00	C
	ATOM	434	NZ	LYS	A	82	34.871	35.692	18.703	1.00	0.00	N
15	ATOM	435	N	VAL	A	83	30.395	41.220	21.453	1.00	0.00	N
	ATOM	436	CA	VAL	A	83	30.291	42.634	21.125	1.00	0.00	C
	ATOM	437	C	VAL	A	83	31.620	43.372	21.232	1.00	0.00	C
	ATOM	438	O	VAL	A	83	32.304	43.299	22.253	1.00	0.00	O
	ATOM	439	CB	VAL	A	83	29.261	43.342	22.046	1.00	0.00	C
20	ATOM	440	CG1	VAL	A	83	29.131	44.810	21.662	1.00	0.00	C
	ATOM	441	CG2	VAL	A	83	27.903	42.651	21.941	1.00	0.00	C
	ATOM	442	N	PHE	A	84	31.978	44.084	20.168	1.00	0.00	N
	ATOM	443	CA	PHE	A	84	33.208	44.868	20.147	1.00	0.00	C
	ATOM	444	C	PHE	A	84	32.880	46.356	20.069	1.00	0.00	C
25	ATOM	445	O	PHE	A	84	32.350	46.823	19.062	1.00	0.00	O
	ATOM	446	CB	PHE	A	84	34.082	44.492	18.946	1.00	0.00	C
	ATOM	447	CG	PHE	A	84	34.769	43.166	19.083	1.00	0.00	C
	ATOM	448	CD1	PHE	A	84	34.331	42.061	18.361	1.00	0.00	C
	ATOM	449	CD2	PHE	A	84	35.862	43.023	19.934	1.00	0.00	C
30	ATOM	450	CE1	PHE	A	84	34.976	40.826	18.482	1.00	0.00	C
	ATOM	451	CE2	PHE	A	84	36.515	41.798	20.063	1.00	0.00	C
	ATOM	452	CZ	PHE	A	84	36.072	40.697	19.337	1.00	0.00	C
	ATOM	453	N	VAL	A	85	33.185	47.084	21.141	1.00	0.00	N
	ATOM	454	CA	VAL	A	85	32.958	48.527	21.204	1.00	0.00	C
35	ATOM	455	C	VAL	A	85	34.271	49.163	20.770	1.00	0.00	C
	ATOM	456	O	VAL	A	85	35.285	49.045	21.458	1.00	0.00	O
	ATOM	457	CB	VAL	A	85	32.601	48.977	22.639	1.00	0.00	C
	ATOM	458	CG1	VAL	A	85	32.411	50.495	22.688	1.00	0.00	C
	ATOM	459	CG2	VAL	A	85	31.325	48.272	23.086	1.00	0.00	C
40	ATOM	460	N	VAL	A	86	34.242	49.839	19.627	1.00	0.00	N
	ATOM	461	CA	VAL	A	86	35.442	50.443	19.064	1.00	0.00	C
	ATOM	462	C	VAL	A	86	35.510	51.968	19.176	1.00	0.00	C
	ATOM	463	O	VAL	A	86	34.875	52.686	18.403	1.00	0.00	O
	ATOM	464	CB	VAL	A	86	35.577	50.032	17.576	1.00	0.00	C
45	ATOM	465	CG1	VAL	A	86	36.906	50.518	17.007	1.00	0.00	C
	ATOM	466	CG2	VAL	A	86	35.451	48.512	17.445	1.00	0.00	C
	ATOM	467	N	PRO	A	87	36.296	52.477	20.139	1.00	0.00	N
	ATOM	468	CA	PRO	A	87	36.451	53.923	20.348	1.00	0.00	C
	ATOM	469	C	PRO	A	87	37.147	54.566	19.148	1.00	0.00	C
50	ATOM	470	O	PRO	A	87	38.123	54.017	18.626	1.00	0.00	O
	ATOM	471	CB	PRO	A	87	37.309	54.003	21.613	1.00	0.00	C
	ATOM	472	CG	PRO	A	87	37.009	52.698	22.318	1.00	0.00	C
	ATOM	473	CD	PRO	A	87	37.018	51.724	21.177	1.00	0.00	C
	ATOM	474	N	HIS	A	88	36.649	55.722	18.715	1.00	0.00	N
55	ATOM	475	CA	HIS	A	88	37.237	56.421	17.576	1.00	0.00	C
	ATOM	476	C	HIS	A	88	37.019	57.929	17.662	1.00	0.00	C
	ATOM	477	O	HIS	A	88	36.206	58.414	18.452	1.00	0.00	O
	ATOM	478	CB	HIS	A	88	36.662	55.876	16.258	1.00	0.00	C
	ATOM	479	CG	HIS	A	88	35.211	56.184	16.053	1.00	0.00	C
60	ATOM	480	ND1	HIS	A	88	34.774	57.311	15.390	1.00	0.00	N
	ATOM	481	CD2	HIS	A	88	34.097	55.513	16.430	1.00	0.00	C
	ATOM	482	CE1	HIS	A	88	33.454	57.321	15.367	1.00	0.00	C
	ATOM	483	NE2	HIS	A	88	33.018	56.241	15.990	1.00	0.00	N
	ATOM	484	N	SER	A	89	37.757	58.664	16.841	1.00	0.00	N
	ATOM	485	CA	SER	A	89	37.676	60.115	16.827	1.00	0.00	C

5	ATOM	486	C	SER	A	89	37.857	60.572	15.387	1.00	0.00	C
	ATOM	487	O	SER	A	89	38.933	60.414	14.809	1.00	0.00	O
	ATOM	488	CB	SER	A	89	38.779	60.694	17.724	1.00	0.00	C
	ATOM	489	OG	SER	A	89	38.743	62.109	17.760	1.00	0.00	O
	ATOM	490	N	HIS	A	90	36.797	61.123	14.809	1.00	0.00	N
10	ATOM	491	CA	HIS	A	90	36.839	61.587	13.428	1.00	0.00	C
	ATOM	492	C	HIS	A	90	37.494	62.965	13.354	1.00	0.00	C
	ATOM	493	O	HIS	A	90	36.918	63.966	13.794	1.00	0.00	O
	ATOM	494	CB	HIS	A	90	35.419	61.634	12.856	1.00	0.00	C
	ATOM	495	CG	HIS	A	90	35.370	61.921	11.390	1.00	0.00	C
15	ATOM	496	ND1	HIS	A	90	35.986	61.118	10.455	1.00	0.00	N
	ATOM	497	CD2	HIS	A	90	34.794	62.931	10.698	1.00	0.00	C
	ATOM	498	CE1	HIS	A	90	35.793	61.621	9.250	1.00	0.00	C
	ATOM	499	NE2	HIS	A	90	35.072	62.721	9.370	1.00	0.00	N
	ATOM	500	N	ASN	A	91	38.705	63.003	12.802	1.00	0.00	N
20	ATOM	501	CA	ASN	A	91	39.467	64.242	12.675	1.00	0.00	C
	ATOM	502	C	ASN	A	91	39.630	64.672	11.223	1.00	0.00	C
	ATOM	503	O	ASN	A	91	40.326	64.019	10.446	1.00	0.00	O
	ATOM	504	CB	ASN	A	91	40.857	64.082	13.300	1.00	0.00	C
	ATOM	505	CG	ASN	A	91	40.812	63.944	14.807	1.00	0.00	C
25	ATOM	506	OD1	ASN	A	91	40.207	63.013	15.344	1.00	0.00	O
	ATOM	507	ND2	ASN	A	91	41.456	64.872	15.500	1.00	0.00	N
	ATOM	508	N	ASP	A	92	38.996	65.784	10.871	1.00	0.00	N
	ATOM	509	CA	ASP	A	92	39.064	66.310	9.515	1.00	0.00	C
	ATOM	510	C	ASP	A	92	40.293	67.170	9.280	1.00	0.00	C
30	ATOM	511	O	ASP	A	92	40.522	68.138	10.002	1.00	0.00	O
	ATOM	512	CB	ASP	A	92	37.828	67.157	9.224	1.00	0.00	C
	ATOM	513	CG	ASP	A	92	36.556	66.379	9.378	1.00	0.00	C
	ATOM	514	OD1	ASP	A	92	36.330	65.473	8.556	1.00	0.00	O
	ATOM	515	OD2	ASP	A	92	35.799	66.665	10.327	1.00	0.00	O
35	ATOM	516	N	PRO	A	93	41.114	66.812	8.281	1.00	0.00	N
	ATOM	517	CA	PRO	A	93	42.311	67.605	7.983	1.00	0.00	C
	ATOM	518	C	PRO	A	93	41.825	68.880	7.288	1.00	0.00	C
	ATOM	519	O	PRO	A	93	42.162	69.148	6.133	1.00	0.00	O
	ATOM	520	CB	PRO	A	93	43.104	66.699	7.043	1.00	0.00	C
40	ATOM	521	CG	PRO	A	93	42.681	65.313	7.468	1.00	0.00	C
	ATOM	522	CD	PRO	A	93	41.191	65.492	7.633	1.00	0.00	C
	ATOM	523	N	GLY	A	94	41.007	69.642	8.008	1.00	0.00	N
	ATOM	524	CA	GLY	A	94	40.447	70.870	7.480	1.00	0.00	C
	ATOM	525	C	GLY	A	94	38.966	70.728	7.157	1.00	0.00	C
45	ATOM	526	O	GLY	A	94	38.529	69.702	6.631	1.00	0.00	O
	ATOM	527	N	TRP	A	95	38.193	71.753	7.507	1.00	0.00	N
	ATOM	528	CA	TRP	A	95	36.757	71.810	7.233	1.00	0.00	C
	ATOM	529	C	TRP	A	95	36.243	73.193	7.623	1.00	0.00	C
	ATOM	530	O	TRP	A	95	36.126	74.071	6.771	1.00	0.00	O
50	ATOM	531	CB	TRP	A	95	35.966	70.740	7.997	1.00	0.00	C
	ATOM	532	CG	TRP	A	95	34.484	70.809	7.673	1.00	0.00	C
	ATOM	533	CD1	TRP	A	95	33.929	71.139	6.467	1.00	0.00	C
	ATOM	534	CD2	TRP	A	95	33.383	70.522	8.552	1.00	0.00	C
	ATOM	535	NE1	TRP	A	95	32.557	71.076	6.539	1.00	0.00	N
55	ATOM	536	CE2	TRP	A	95	32.195	70.699	7.805	1.00	0.00	C
	ATOM	537	CE3	TRP	A	95	33.285	70.129	9.896	1.00	0.00	C
	ATOM	538	CZ2	TRP	A	95	30.922	70.497	8.356	1.00	0.00	C
	ATOM	539	CZ3	TRP	A	95	32.015	69.927	10.445	1.00	0.00	C
	ATOM	540	CH2	TRP	A	95	30.854	70.112	9.674	1.00	0.00	C
60	ATOM	541	N	ILE	A	96	35.929	73.385	8.903	1.00	0.00	N
	ATOM	542	CA	ILE	A	96	35.467	74.693	9.363	1.00	0.00	C
	ATOM	543	C	ILE	A	96	36.650	75.452	9.955	1.00	0.00	C
	ATOM	544	O	ILE	A	96	36.557	76.638	10.273	1.00	0.00	O
	ATOM	545	CB	ILE	A	96	34.325	74.584	10.396	1.00	0.00	C
	ATOM	546	CG1	ILE	A	96	34.748	73.707	11.571	1.00	0.00	C

	ATOM	547	CG2	ILE	A	96	33.073	74.039	9.716	1.00	0.00	C
	ATOM	548	CD1	ILE	A	96	33.731	73.670	12.689	1.00	0.00	C
	ATOM	549	N	GLN	A	97	37.763	74.739	10.096	1.00	0.00	N
	ATOM	550	CA	GLN	A	97	39.023	75.290	10.575	1.00	0.00	C
5	ATOM	551	C	GLN	A	97	40.065	74.682	9.640	1.00	0.00	C
	ATOM	552	O	GLN	A	97	39.793	73.680	8.981	1.00	0.00	O
	ATOM	553	CB	GLN	A	97	39.322	74.857	12.016	1.00	0.00	C
	ATOM	554	CG	GLN	A	97	38.430	75.493	13.081	1.00	0.00	C
10	ATOM	555	CD	GLN	A	97	38.920	75.205	14.494	1.00	0.00	C
	ATOM	556	OE1	GLN	A	97	40.053	75.539	14.853	1.00	0.00	O
	ATOM	557	NE2	GLN	A	97	38.069	74.580	15.303	1.00	0.00	N
	ATOM	558	N	THR	A	98	41.245	75.280	9.566	1.00	0.00	N
	ATOM	559	CA	THR	A	98	42.290	74.739	8.707	1.00	0.00	C
15	ATOM	560	C	THR	A	98	42.938	73.549	9.407	1.00	0.00	C
	ATOM	561	O	THR	A	98	42.706	73.310	10.597	1.00	0.00	O
	ATOM	562	CB	THR	A	98	43.398	75.760	8.450	1.00	0.00	C
	ATOM	563	OG1	THR	A	98	44.036	76.068	9.692	1.00	0.00	O
	ATOM	564	CG2	THR	A	98	42.836	77.039	7.834	1.00	0.00	C
20	ATOM	565	N	PHE	A	99	43.753	72.809	8.666	1.00	0.00	N
	ATOM	566	CA	PHE	A	99	44.461	71.664	9.223	1.00	0.00	C
	ATOM	567	C	PHE	A	99	45.209	72.088	10.488	1.00	0.00	C
	ATOM	568	O	PHE	A	99	45.049	71.481	11.543	1.00	0.00	O
	ATOM	569	CB	PHE	A	99	45.471	71.119	8.208	1.00	0.00	C
25	ATOM	570	CG	PHE	A	99	46.348	70.015	8.749	1.00	0.00	C
	ATOM	571	CD1	PHE	A	99	45.937	68.685	8.690	1.00	0.00	C
	ATOM	572	CD2	PHE	A	99	47.589	70.307	9.315	1.00	0.00	C
	ATOM	573	CE1	PHE	A	99	46.748	67.659	9.185	1.00	0.00	C
	ATOM	574	CE2	PHE	A	99	48.408	69.290	9.813	1.00	0.00	C
	ATOM	575	CZ	PHE	A	99	47.985	67.962	9.746	1.00	0.00	C
30	ATOM	576	N	GLU	A	100	46.028	73.131	10.372	1.00	0.00	N
	ATOM	577	CA	GLU	A	100	46.820	73.615	11.504	1.00	0.00	C
	ATOM	578	C	GLU	A	100	45.975	74.134	12.667	1.00	0.00	C
	ATOM	579	O	GLU	A	100	46.332	73.937	13.829	1.00	0.00	O
35	ATOM	580	CB	GLU	A	100	47.789	74.707	11.037	1.00	0.00	C
	ATOM	581	CG	GLU	A	100	48.843	75.111	12.066	1.00	0.00	C
	ATOM	582	CD	GLU	A	100	49.755	73.964	12.474	1.00	0.00	C
	ATOM	583	OE1	GLU	A	100	49.930	73.016	11.674	1.00	0.00	O
	ATOM	584	OE2	GLU	A	100	50.313	74.020	13.593	1.00	0.00	O
40	ATOM	585	N	GLU	A	101	44.862	74.798	12.364	1.00	0.00	N
	ATOM	586	CA	GLU	A	101	43.990	75.314	13.419	1.00	0.00	C
	ATOM	587	C	GLU	A	101	43.417	74.144	14.223	1.00	0.00	C
	ATOM	588	O	GLU	A	101	43.409	74.170	15.455	1.00	0.00	O
	ATOM	589	CB	GLU	A	101	42.850	76.149	12.821	1.00	0.00	C
45	ATOM	590	CG	GLU	A	101	43.310	77.447	12.156	1.00	0.00	C
	ATOM	591	CD	GLU	A	101	42.156	78.271	11.599	1.00	0.00	C
	ATOM	592	OE1	GLU	A	101	41.224	77.680	11.016	1.00	0.00	O
	ATOM	593	OE2	GLU	A	101	42.191	79.513	11.735	1.00	0.00	O
	ATOM	594	N	TYR	A	102	42.932	73.120	13.525	1.00	0.00	N
50	ATOM	595	CA	TYR	A	102	42.386	71.947	14.205	1.00	0.00	C
	ATOM	596	C	TYR	A	102	43.482	71.246	14.999	1.00	0.00	C
	ATOM	597	O	TYR	A	102	43.257	70.790	16.122	1.00	0.00	O
	ATOM	598	CB	TYR	A	102	41.821	70.935	13.209	1.00	0.00	C
	ATOM	599	CG	TYR	A	102	40.409	71.175	12.734	1.00	0.00	C
55	ATOM	600	CD1	TYR	A	102	39.355	71.348	13.637	1.00	0.00	C
	ATOM	601	CD2	TYR	A	102	40.110	71.130	11.373	1.00	0.00	C
	ATOM	602	CE1	TYR	A	102	38.033	71.459	13.185	1.00	0.00	C
	ATOM	603	CE2	TYR	A	102	38.810	71.239	10.917	1.00	0.00	C
	ATOM	604	CZ	TYR	A	102	37.775	71.401	11.821	1.00	0.00	C
60	ATOM	605	OH	TYR	A	102	36.493	71.491	11.335	1.00	0.00	O
	ATOM	606	N	TYR	A	103	44.664	71.137	14.403	1.00	0.00	N
	ATOM	607	CA	TYR	A	103	45.764	70.470	15.080	1.00	0.00	C

5	ATOM	608	C	TYR	A	103	46.086	71.147	16.405	1.00	0.00	C
	ATOM	609	O	TYR	A	103	46.216	70.488	17.434	1.00	0.00	O
	ATOM	610	CB	TYR	A	103	47.024	70.466	14.216	1.00	0.00	C
	ATOM	611	CG	TYR	A	103	48.190	69.808	14.915	1.00	0.00	C
	ATOM	612	CD1	TYR	A	103	48.194	68.433	15.158	1.00	0.00	C
10	ATOM	613	CD2	TYR	A	103	49.262	70.565	15.392	1.00	0.00	C
	ATOM	614	CE1	TYR	A	103	49.233	67.830	15.861	1.00	0.00	C
	ATOM	615	CE2	TYR	A	103	50.305	69.972	16.098	1.00	0.00	C
	ATOM	616	CZ	TYR	A	103	50.284	68.605	16.330	1.00	0.00	C
	ATOM	617	OH	TYR	A	103	51.305	68.014	17.037	1.00	0.00	O
15	ATOM	618	N	GLN	A	104	46.212	72.468	16.372	1.00	0.00	N
	ATOM	619	CA	GLN	A	104	46.544	73.231	17.568	1.00	0.00	C
	ATOM	620	C	GLN	A	104	45.438	73.258	18.611	1.00	0.00	C
	ATOM	621	O	GLN	A	104	45.705	73.155	19.806	1.00	0.00	O
	ATOM	622	CB	GLN	A	104	46.906	74.675	17.190	1.00	0.00	C
20	ATOM	623	CG	GLN	A	104	48.224	74.829	16.440	1.00	0.00	C
	ATOM	624	CD	GLN	A	104	49.410	74.290	17.225	1.00	0.00	C
	ATOM	625	OE1	GLN	A	104	49.459	74.399	18.454	1.00	0.00	O
	ATOM	626	NE2	GLN	A	104	50.378	73.714	16.518	1.00	0.00	N
	ATOM	627	N	HIS	A	105	44.197	73.389	18.161	1.00	0.00	N
25	ATOM	628	CA	HIS	A	105	43.067	73.477	19.077	1.00	0.00	C
	ATOM	629	C	HIS	A	105	42.492	72.152	19.566	1.00	0.00	C
	ATOM	630	O	HIS	A	105	42.010	72.070	20.694	1.00	0.00	O
	ATOM	631	CB	HIS	A	105	41.935	74.279	18.426	1.00	0.00	C
	ATOM	632	CG	HIS	A	105	42.367	75.595	17.856	1.00	0.00	C
30	ATOM	633	ND1	HIS	A	105	41.509	76.421	17.162	1.00	0.00	N
	ATOM	634	CD2	HIS	A	105	43.566	76.226	17.872	1.00	0.00	C
	ATOM	635	CE1	HIS	A	105	42.161	77.503	16.774	1.00	0.00	C
	ATOM	636	NE2	HIS	A	105	43.410	77.409	17.192	1.00	0.00	N
	ATOM	637	N	ASP	A	106	42.549	71.115	18.733	1.00	0.00	N
35	ATOM	638	CA	ASP	A	106	41.951	69.837	19.104	1.00	0.00	C
	ATOM	639	C	ASP	A	106	42.786	68.568	18.974	1.00	0.00	C
	ATOM	640	O	ASP	A	106	43.052	67.887	19.961	1.00	0.00	O
	ATOM	641	CB	ASP	A	106	40.662	69.641	18.296	1.00	0.00	C
	ATOM	642	CG	ASP	A	106	39.644	70.735	18.545	1.00	0.00	C
40	ATOM	643	OD1	ASP	A	106	38.958	70.682	19.585	1.00	0.00	O
	ATOM	644	OD2	ASP	A	106	39.539	71.654	17.705	1.00	0.00	O
	ATOM	645	N	THR	A	107	43.188	68.252	17.749	1.00	0.00	N
	ATOM	646	CA	THR	A	107	43.928	67.027	17.469	1.00	0.00	C
	ATOM	647	C	THR	A	107	45.179	66.710	18.286	1.00	0.00	C
45	ATOM	648	O	THR	A	107	45.365	65.565	18.702	1.00	0.00	O
	ATOM	649	CB	THR	A	107	44.287	66.947	15.981	1.00	0.00	C
	ATOM	650	OG1	THR	A	107	43.103	67.152	15.199	1.00	0.00	O
	ATOM	651	CG2	THR	A	107	44.868	65.570	15.648	1.00	0.00	C
	ATOM	652	N	LYS	A	108	46.048	67.687	18.517	1.00	0.00	N
50	ATOM	653	CA	LYS	A	108	47.249	67.367	19.280	1.00	0.00	C
	ATOM	654	C	LYS	A	108	46.887	66.969	20.707	1.00	0.00	C
	ATOM	655	O	LYS	A	108	47.585	66.176	21.331	1.00	0.00	O
	ATOM	656	CB	LYS	A	108	48.247	68.537	19.273	1.00	0.00	C
	ATOM	657	CG	LYS	A	108	47.856	69.754	20.088	1.00	0.00	C
55	ATOM	658	CD	LYS	A	108	48.942	70.826	19.973	1.00	0.00	C
	ATOM	659	CE	LYS	A	108	48.713	71.978	20.937	1.00	0.00	C
	ATOM	660	NZ	LYS	A	108	49.823	72.978	20.873	1.00	0.00	N
	ATOM	661	N	HIS	A	109	45.786	67.510	21.216	1.00	0.00	N
	ATOM	662	CA	HIS	A	109	45.343	67.184	22.567	1.00	0.00	C
60	ATOM	663	C	HIS	A	109	44.701	65.802	22.575	1.00	0.00	C
	ATOM	664	O	HIS	A	109	44.871	65.029	23.518	1.00	0.00	O
	ATOM	665	CB	HIS	A	109	44.352	68.236	23.055	1.00	0.00	C
	ATOM	666	CG	HIS	A	109	44.923	69.617	23.085	1.00	0.00	C
	ATOM	667	ND1	HIS	A	109	45.939	69.982	23.944	1.00	0.00	N
	ATOM	668	CD2	HIS	A	109	44.652	70.711	22.335	1.00	0.00	C

5	ATOM	669	CE1	HIS	A	109	46.268	71.243	23.721	1.00	0.00	C
	ATOM	670	NE2	HIS	A	109	45.502	71.707	22.749	1.00	0.00	N
	ATOM	671	N	ILE	A	110	43.966	65.496	21.513	1.00	0.00	N
	ATOM	672	CA	ILE	A	110	43.319	64.198	21.382	1.00	0.00	C
	ATOM	673	C	ILE	A	110	44.378	63.099	21.355	1.00	0.00	C
10	ATOM	674	O	ILE	A	110	44.257	62.084	22.040	1.00	0.00	O
	ATOM	675	CB	ILE	A	110	42.492	64.123	20.078	1.00	0.00	C
	ATOM	676	CG1	ILE	A	110	41.302	65.086	20.167	1.00	0.00	C
	ATOM	677	CG2	ILE	A	110	42.043	62.688	19.826	1.00	0.00	C
	ATOM	678	CD1	ILE	A	110	40.511	65.224	18.870	1.00	0.00	C
15	ATOM	679	N	LEU	A	111	45.422	63.305	20.562	1.00	0.00	N
	ATOM	680	CA	LEU	A	111	46.481	62.313	20.456	1.00	0.00	C
	ATOM	681	C	LEU	A	111	47.341	62.244	21.708	1.00	0.00	C
	ATOM	682	O	LEU	A	111	47.783	61.163	22.105	1.00	0.00	O
	ATOM	683	CB	LEU	A	111	47.348	62.597	19.222	1.00	0.00	C
20	ATOM	684	CG	LEU	A	111	46.620	62.277	17.911	1.00	0.00	C
	ATOM	685	CD1	LEU	A	111	47.442	62.742	16.715	1.00	0.00	C
	ATOM	686	CD2	LEU	A	111	46.352	60.774	17.845	1.00	0.00	C
	ATOM	687	N	SER	A	112	47.573	63.390	22.337	1.00	0.00	N
	ATOM	688	CA	SER	A	112	48.381	63.412	23.549	1.00	0.00	C
25	ATOM	689	C	SER	A	112	47.666	62.672	24.679	1.00	0.00	C
	ATOM	690	O	SER	A	112	48.272	61.870	25.395	1.00	0.00	O
	ATOM	691	CB	SER	A	112	48.670	64.853	23.971	1.00	0.00	C
	ATOM	692	OG	SER	A	112	49.509	64.872	25.113	1.00	0.00	O
	ATOM	693	N	ASN	A	113	46.373	62.933	24.838	1.00	0.00	N
30	ATOM	694	CA	ASN	A	113	45.625	62.265	25.891	1.00	0.00	C
	ATOM	695	C	ASN	A	113	45.330	60.802	25.556	1.00	0.00	C
	ATOM	696	O	ASN	A	113	45.143	59.982	26.457	1.00	0.00	O
	ATOM	697	CB	ASN	A	113	44.352	63.052	26.209	1.00	0.00	C
	ATOM	698	CG	ASN	A	113	44.666	64.403	26.833	1.00	0.00	C
35	ATOM	699	OD1	ASN	A	113	45.664	64.541	27.538	1.00	0.00	O
	ATOM	700	ND2	ASN	A	113	43.829	65.397	26.582	1.00	0.00	N
	ATOM	701	N	ALA	A	114	45.310	60.467	24.268	1.00	0.00	N
	ATOM	702	CA	ALA	A	114	45.081	59.080	23.866	1.00	0.00	C
	ATOM	703	C	ALA	A	114	46.296	58.269	24.305	1.00	0.00	C
40	ATOM	704	O	ALA	A	114	46.160	57.174	24.853	1.00	0.00	O
	ATOM	705	CB	ALA	A	114	44.903	58.978	22.349	1.00	0.00	C
	ATOM	706	N	LEU	A	115	47.487	58.814	24.064	1.00	0.00	N
	ATOM	707	CA	LEU	A	115	48.725	58.143	24.445	1.00	0.00	C
	ATOM	708	C	LEU	A	115	48.744	57.892	25.953	1.00	0.00	C
45	ATOM	709	O	LEU	A	115	49.029	56.782	26.408	1.00	0.00	O
	ATOM	710	CB	LEU	A	115	49.942	58.995	24.046	1.00	0.00	C
	ATOM	711	CG	LEU	A	115	51.322	58.485	24.481	1.00	0.00	C
	ATOM	712	CD1	LEU	A	115	51.544	57.075	23.953	1.00	0.00	C
	ATOM	713	CD2	LEU	A	115	52.408	59.419	23.978	1.00	0.00	C
50	ATOM	714	N	ARG	A	116	48.421	58.925	26.721	1.00	0.00	N
	ATOM	715	CA	ARG	A	116	48.412	58.813	28.173	1.00	0.00	C
	ATOM	716	C	ARG	A	116	47.380	57.811	28.677	1.00	0.00	C
	ATOM	717	O	ARG	A	116	47.704	56.900	29.442	1.00	0.00	O
	ATOM	718	CB	ARG	A	116	48.152	60.185	28.797	1.00	0.00	C
55	ATOM	719	CG	ARG	A	116	49.268	61.180	28.533	1.00	0.00	C
	ATOM	720	CD	ARG	A	116	48.932	62.575	29.033	1.00	0.00	C
	ATOM	721	NE	ARG	A	116	50.033	63.508	28.802	1.00	0.00	N
	ATOM	722	CZ	ARG	A	116	49.984	64.808	29.075	1.00	0.00	C
	ATOM	723	NH1	ARG	A	116	48.882	65.338	29.590	1.00	0.00	N
60	ATOM	724	NH2	ARG	A	116	51.039	65.579	28.838	1.00	0.00	N
	ATOM	725	N	HIS	A	117	46.138	57.971	28.236	1.00	0.00	N
	ATOM	726	CA	HIS	A	117	45.070	57.085	28.670	1.00	0.00	C
	ATOM	727	C	HIS	A	117	45.204	55.628	28.265	1.00	0.00	C
	ATOM	728	O	HIS	A	117	44.892	54.745	29.059	1.00	0.00	O
	ATOM	729	CB	HIS	A	117	43.726	57.651	28.230	1.00	0.00	C

5	ATOM	730	CG	HIS	A	117	43.233	58.737	29.130	1.00	0.00	C
	ATOM	731	ND1	HIS	A	117	42.625	58.474	30.339	1.00	0.00	N
	ATOM	732	CD2	HIS	A	117	43.355	60.083	29.054	1.00	0.00	C
	ATOM	733	CE1	HIS	A	117	42.399	59.612	30.973	1.00	0.00	C
	ATOM	734	NE2	HIS	A	117	42.834	60.604	30.216	1.00	0.00	N
10	ATOM	735	N	LEU	A	118	45.662	55.366	27.044	1.00	0.00	N
	ATOM	736	CA	LEU	A	118	45.839	53.986	26.606	1.00	0.00	C
	ATOM	737	C	LEU	A	118	47.012	53.379	27.368	1.00	0.00	C
	ATOM	738	O	LEU	A	118	46.987	52.208	27.747	1.00	0.00	O
	ATOM	739	CB	LEU	A	118	46.099	53.924	25.095	1.00	0.00	C
15	ATOM	740	CG	LEU	A	118	44.915	54.378	24.230	1.00	0.00	C
	ATOM	741	CD1	LEU	A	118	45.301	54.355	22.759	1.00	0.00	C
	ATOM	742	CD2	LEU	A	118	43.722	53.470	24.484	1.00	0.00	C
	ATOM	743	N	HIS	A	119	48.047	54.180	27.589	1.00	0.00	N
	ATOM	744	CA	HIS	A	119	49.210	53.707	28.321	1.00	0.00	C
20	ATOM	745	C	HIS	A	119	48.791	53.245	29.717	1.00	0.00	C
	ATOM	746	O	HIS	A	119	49.170	52.160	30.159	1.00	0.00	O
	ATOM	747	CB	HIS	A	119	50.257	54.826	28.422	1.00	0.00	C
	ATOM	748	CG	HIS	A	119	51.418	54.493	29.307	1.00	0.00	C
	ATOM	749	ND1	HIS	A	119	51.416	54.745	30.662	1.00	0.00	N
25	ATOM	750	CD2	HIS	A	119	52.603	53.897	29.036	1.00	0.00	C
	ATOM	751	CE1	HIS	A	119	52.551	54.319	31.189	1.00	0.00	C
	ATOM	752	NE2	HIS	A	119	53.289	53.799	30.224	1.00	0.00	N
	ATOM	753	N	ASP	A	120	47.984	54.060	30.391	1.00	0.00	N
	ATOM	754	CA	ASP	A	120	47.527	53.762	31.750	1.00	0.00	C
30	ATOM	755	C	ASP	A	120	46.370	52.775	31.895	1.00	0.00	C
	ATOM	756	O	ASP	A	120	46.126	52.274	32.993	1.00	0.00	O
	ATOM	757	CB	ASP	A	120	47.147	55.057	32.469	1.00	0.00	C
	ATOM	758	CG	ASP	A	120	48.324	55.989	32.653	1.00	0.00	C
	ATOM	759	OD1	ASP	A	120	49.475	55.505	32.673	1.00	0.00	O
35	ATOM	760	OD2	ASP	A	120	48.094	57.207	32.793	1.00	0.00	O
	ATOM	761	N	ASN	A	121	45.656	52.501	30.807	1.00	0.00	N
	ATOM	762	CA	ASN	A	121	44.523	51.574	30.849	1.00	0.00	C
	ATOM	763	C	ASN	A	121	44.681	50.515	29.758	1.00	0.00	C
	ATOM	764	O	ASN	A	121	44.105	50.630	28.674	1.00	0.00	O
40	ATOM	765	CB	ASN	A	121	43.210	52.343	30.661	1.00	0.00	C
	ATOM	766	CG	ASN	A	121	43.007	53.423	31.719	1.00	0.00	C
	ATOM	767	OD1	ASN	A	121	43.448	54.567	31.558	1.00	0.00	O
	ATOM	768	ND2	ASN	A	121	42.348	53.059	32.813	1.00	0.00	N
	ATOM	769	N	PRO	A	122	45.454	49.452	30.046	1.00	0.00	N
45	ATOM	770	CA	PRO	A	122	45.732	48.346	29.122	1.00	0.00	C
	ATOM	771	C	PRO	A	122	44.580	47.753	28.311	1.00	0.00	C
	ATOM	772	O	PRO	A	122	44.798	47.303	27.184	1.00	0.00	O
	ATOM	773	CB	PRO	A	122	46.426	47.311	30.017	1.00	0.00	C
	ATOM	774	CG	PRO	A	122	45.937	47.647	31.399	1.00	0.00	C
50	ATOM	775	CD	PRO	A	122	45.974	49.145	31.389	1.00	0.00	C
	ATOM	776	N	GLU	A	123	43.366	47.753	28.858	1.00	0.00	N
	ATOM	777	CA	GLU	A	123	42.224	47.192	28.135	1.00	0.00	C
	ATOM	778	C	GLU	A	123	41.503	48.170	27.215	1.00	0.00	C
	ATOM	779	O	GLU	A	123	40.678	47.759	26.398	1.00	0.00	O
55	ATOM	780	CB	GLU	A	123	41.204	46.591	29.105	1.00	0.00	C
	ATOM	781	CG	GLU	A	123	41.476	45.145	29.477	1.00	0.00	C
	ATOM	782	CD	GLU	A	123	42.676	44.989	30.375	1.00	0.00	C
	ATOM	783	OE1	GLU	A	123	42.678	45.605	31.463	1.00	0.00	O
	ATOM	784	OE2	GLU	A	123	43.613	44.249	29.999	1.00	0.00	O
60	ATOM	785	N	MET	A	124	41.798	49.458	27.352	1.00	0.00	N
	ATOM	786	CA	MET	A	124	41.165	50.464	26.506	1.00	0.00	C
	ATOM	787	C	MET	A	124	41.742	50.354	25.092	1.00	0.00	C
	ATOM	788	O	MET	A	124	42.918	50.024	24.919	1.00	0.00	O
	ATOM	789	CB	MET	A	124	41.418	51.864	27.068	1.00	0.00	C
	ATOM	790	CG	MET	A	124	40.644	52.963	26.354	1.00	0.00	C

5	ATOM	791	SD	MET	A	124	38.864	52.639	26.329	1.00	0.00	S
	ATOM	792	CE	MET	A	124	38.255	54.154	25.577	1.00	0.00	C
	ATOM	793	N	LYS	A	125	40.908	50.624	24.090	1.00	0.00	N
	ATOM	794	CA	LYS	A	125	41.322	50.546	22.691	1.00	0.00	C
	ATOM	795	C	LYS	A	125	40.980	51.842	21.954	1.00	0.00	C
10	ATOM	796	O	LYS	A	125	40.178	52.646	22.434	1.00	0.00	O
	ATOM	797	CB	LYS	A	125	40.623	49.360	22.018	1.00	0.00	C
	ATOM	798	CG	LYS	A	125	40.950	48.006	22.643	1.00	0.00	C
	ATOM	799	CD	LYS	A	125	42.347	47.539	22.267	1.00	0.00	C
	ATOM	800	CE	LYS	A	125	42.747	46.273	23.022	1.00	0.00	C
15	ATOM	801	NZ	LYS	A	125	41.818	45.136	22.781	1.00	0.00	N
	ATOM	802	N	PHE	A	126	41.569	52.039	20.778	1.00	0.00	N
	ATOM	803	CA	PHE	A	126	41.324	53.264	20.016	1.00	0.00	C
	ATOM	804	C	PHE	A	126	41.824	53.081	18.582	1.00	0.00	C
	ATOM	805	O	PHE	A	126	42.900	52.529	18.366	1.00	0.00	O
20	ATOM	806	CB	PHE	A	126	42.077	54.418	20.698	1.00	0.00	C
	ATOM	807	CG	PHE	A	126	41.706	55.797	20.203	1.00	0.00	C
	ATOM	808	CD1	PHE	A	126	40.384	56.230	20.214	1.00	0.00	C
	ATOM	809	CD2	PHE	A	126	42.699	56.689	19.802	1.00	0.00	C
	ATOM	810	CE1	PHE	A	126	40.054	57.536	19.838	1.00	0.00	C
25	ATOM	811	CE2	PHE	A	126	42.384	57.997	19.423	1.00	0.00	C
	ATOM	812	CZ	PHE	A	126	41.057	58.422	19.442	1.00	0.00	C
	ATOM	813	N	ILE	A	127	41.042	53.526	17.602	1.00	0.00	N
	ATOM	814	CA	ILE	A	127	41.471	53.418	16.210	1.00	0.00	C
	ATOM	815	C	ILE	A	127	41.733	54.811	15.640	1.00	0.00	C
30	ATOM	816	O	ILE	A	127	41.067	55.782	16.021	1.00	0.00	O
	ATOM	817	CB	ILE	A	127	40.427	52.687	15.338	1.00	0.00	C
	ATOM	818	CG1	ILE	A	127	39.089	53.433	15.363	1.00	0.00	C
	ATOM	819	CG2	ILE	A	127	40.258	51.260	15.840	1.00	0.00	C
	ATOM	820	CD1	ILE	A	127	38.066	52.870	14.392	1.00	0.00	C
35	ATOM	821	N	TRP	A	128	42.713	54.910	14.745	1.00	0.00	N
	ATOM	822	CA	TRP	A	128	43.061	56.193	14.135	1.00	0.00	C
	ATOM	823	C	TRP	A	128	43.178	56.076	12.617	1.00	0.00	C
	ATOM	824	O	TRP	A	128	43.820	55.161	12.105	1.00	0.00	O
	ATOM	825	CB	TRP	A	128	44.372	56.719	14.716	1.00	0.00	C
40	ATOM	826	CG	TRP	A	128	44.611	58.146	14.356	1.00	0.00	C
	ATOM	827	CD1	TRP	A	128	45.351	58.621	13.309	1.00	0.00	C
	ATOM	828	CD2	TRP	A	128	44.053	59.290	15.006	1.00	0.00	C
	ATOM	829	NE1	TRP	A	128	45.287	59.995	13.269	1.00	0.00	N
	ATOM	830	CE2	TRP	A	128	44.495	60.431	14.300	1.00	0.00	C
45	ATOM	831	CE3	TRP	A	128	43.216	59.464	16.120	1.00	0.00	C
	ATOM	832	C22	TRP	A	128	44.130	61.731	14.670	1.00	0.00	C
	ATOM	833	C23	TRP	A	128	42.852	60.758	16.486	1.00	0.00	C
	ATOM	834	CH2	TRP	A	128	43.311	61.873	15.761	1.00	0.00	C
	ATOM	835	N	ALA	A	129	42.582	57.027	11.900	1.00	0.00	N
50	ATOM	836	CA	ALA	A	129	42.587	56.974	10.439	1.00	0.00	C
	ATOM	837	C	ALA	A	129	43.438	57.984	9.672	1.00	0.00	C
	ATOM	838	O	ALA	A	129	44.069	57.625	8.681	1.00	0.00	O
	ATOM	839	CB	ALA	A	129	41.150	57.054	9.933	1.00	0.00	C
	ATOM	840	N	GLU	A	130	43.454	59.234	10.123	1.00	0.00	N
55	ATOM	841	CA	GLU	A	130	44.180	60.299	9.427	1.00	0.00	C
	ATOM	842	C	GLU	A	130	45.665	60.421	9.757	1.00	0.00	C
	ATOM	843	O	GLU	A	130	46.045	61.041	10.752	1.00	0.00	O
	ATOM	844	CB	GLU	A	130	43.492	61.641	9.688	1.00	0.00	C
	ATOM	845	CG	GLU	A	130	42.001	61.660	9.373	1.00	0.00	C
60	ATOM	846	CD	GLU	A	130	41.151	61.055	10.480	1.00	0.00	C
	ATOM	847	OE1	GLU	A	130	41.701	60.758	11.563	1.00	0.00	O
	ATOM	848	OE2	GLU	A	130	39.930	60.888	10.269	1.00	0.00	O
	ATOM	849	N	ILE	A	131	46.509	59.870	8.890	1.00	0.00	N
	ATOM	850	CA	ILE	A	131	47.945	59.908	9.128	1.00	0.00	C
	ATOM	851	C	ILE	A	131	48.564	61.304	9.007	1.00	0.00	C

5	ATOM	852	O	ILE	A	131	49.593	61.574	9.632	1.00	0.00	O
	ATOM	853	CB	ILE	A	131	48.676	58.906	8.207	1.00	0.00	C
	ATOM	854	CG1	ILE	A	131	48.061	57.512	8.393	1.00	0.00	C
	ATOM	855	CG2	ILE	A	131	50.161	58.851	8.553	1.00	0.00	C
	ATOM	856	CD1	ILE	A	131	47.933	57.084	9.857	1.00	0.00	C
10	ATOM	857	N	SER	A	132	47.946	62.191	8.227	1.00	0.00	N
	ATOM	858	CA	SER	A	132	48.462	63.553	8.088	1.00	0.00	C
	ATOM	859	C	SER	A	132	48.604	64.160	9.488	1.00	0.00	C
	ATOM	860	O	SER	A	132	49.626	64.771	9.813	1.00	0.00	O
	ATOM	861	CB	SER	A	132	47.516	64.416	7.234	1.00	0.00	C
15	ATOM	862	OG	SER	A	132	46.188	64.403	7.740	1.00	0.00	O
	ATOM	863	N	TYR	A	133	47.575	63.980	10.312	1.00	0.00	N
	ATOM	864	CA	TYR	A	133	47.588	64.482	11.684	1.00	0.00	C
	ATOM	865	C	TYR	A	133	48.554	63.692	12.565	1.00	0.00	C
	ATOM	866	O	TYR	A	133	49.316	64.278	13.339	1.00	0.00	O
20	ATOM	867	CB	TYR	A	133	46.192	64.396	12.305	1.00	0.00	C
	ATOM	868	CG	TYR	A	133	45.288	65.570	12.003	1.00	0.00	C
	ATOM	869	CD1	TYR	A	133	44.019	65.372	11.460	1.00	0.00	C
	ATOM	870	CD2	TYR	A	133	45.695	66.877	12.281	1.00	0.00	C
	ATOM	871	CE1	TYR	A	133	43.172	66.447	11.200	1.00	0.00	C
25	ATOM	872	CE2	TYR	A	133	44.858	67.959	12.027	1.00	0.00	C
	ATOM	873	CZ	TYR	A	133	43.600	67.738	11.488	1.00	0.00	C
	ATOM	874	OH	TYR	A	133	42.769	68.808	11.250	1.00	0.00	O
	ATOM	875	N	PHE	A	134	48.526	62.366	12.452	1.00	0.00	N
	ATOM	876	CA	PHE	A	134	49.397	61.541	13.284	1.00	0.00	C
30	ATOM	877	C	PHE	A	134	50.876	61.830	13.058	1.00	0.00	C
	ATOM	878	O	PHE	A	134	51.655	61.898	14.012	1.00	0.00	O
	ATOM	879	CB	PHE	A	134	49.143	60.050	13.054	1.00	0.00	C
	ATOM	880	CG	PHE	A	134	49.662	59.182	14.167	1.00	0.00	C
	ATOM	881	CD1	PHE	A	134	48.923	59.015	15.335	1.00	0.00	C
35	ATOM	882	CD2	PHE	A	134	50.920	58.594	14.082	1.00	0.00	C
	ATOM	883	CE1	PHE	A	134	49.431	58.279	16.406	1.00	0.00	C
	ATOM	884	CE2	PHE	A	134	51.438	57.859	15.145	1.00	0.00	C
	ATOM	885	CZ	PHE	A	134	50.691	57.701	16.312	1.00	0.00	C
	ATOM	886	N	ALA	A	135	51.264	61.991	11.796	1.00	0.00	N
40	ATOM	887	CA	ALA	A	135	52.656	62.270	11.469	1.00	0.00	C
	ATOM	888	C	ALA	A	135	53.070	63.619	12.060	1.00	0.00	C
	ATOM	889	O	ALA	A	135	54.171	63.759	12.598	1.00	0.00	O
	ATOM	890	CB	ALA	A	135	52.845	62.265	9.957	1.00	0.00	C
	ATOM	891	N	ARG	A	136	52.181	64.602	11.958	1.00	0.00	N
45	ATOM	892	CA	ARG	A	136	52.417	65.945	12.489	1.00	0.00	C
	ATOM	893	C	ARG	A	136	52.660	65.867	13.998	1.00	0.00	C
	ATOM	894	O	ARG	A	136	53.548	66.527	14.540	1.00	0.00	O
	ATOM	895	CB	ARG	A	136	51.195	66.829	12.213	1.00	0.00	C
	ATOM	896	CG	ARG	A	136	51.232	68.221	12.856	1.00	0.00	C
50	ATOM	897	CD	ARG	A	136	51.964	69.245	11.990	1.00	0.00	C
	ATOM	898	NE	ARG	A	136	51.880	70.593	12.559	1.00	0.00	N
	ATOM	899	CZ	ARG	A	136	52.508	70.966	13.668	1.00	0.00	C
	ATOM	900	NH1	ARG	A	136	53.269	70.095	14.318	1.00	0.00	N
	ATOM	901	NH2	ARG	A	136	52.367	72.198	14.139	1.00	0.00	N
55	ATOM	902	N	PHE	A	137	51.858	65.044	14.665	1.00	0.00	N
	ATOM	903	CA	PHE	A	137	51.946	64.856	16.109	1.00	0.00	C
	ATOM	904	C	PHE	A	137	53.217	64.115	16.520	1.00	0.00	C
	ATOM	905	O	PHE	A	137	54.007	64.599	17.336	1.00	0.00	O
	ATOM	906	CB	PHE	A	137	50.729	64.065	16.587	1.00	0.00	C
60	ATOM	907	CG	PHE	A	137	50.707	63.817	18.063	1.00	0.00	C
	ATOM	908	CD1	PHE	A	137	50.395	64.844	18.948	1.00	0.00	C
	ATOM	909	CD2	PHE	A	137	50.998	62.555	18.572	1.00	0.00	C
	ATOM	910	CE1	PHE	A	137	50.369	64.619	20.319	1.00	0.00	C
	ATOM	911	CE2	PHE	A	137	50.975	62.319	19.947	1.00	0.00	C
	ATOM	912	CZ	PHE	A	137	50.659	63.356	20.819	1.00	0.00	C

5	ATOM	913	N	TYR	A	138	53.400	62.933	15.943	1.00	0.00	N
	ATOM	914	CA	TYR	A	138	54.546	62.088	16.241	1.00	0.00	C
	ATOM	915	C	TYR	A	138	55.897	62.793	16.136	1.00	0.00	C
	ATOM	916	O	TYR	A	138	56.738	62.665	17.028	1.00	0.00	O
	ATOM	917	CB	TYR	A	138	54.549	60.871	15.320	1.00	0.00	C
10	ATOM	918	CG	TYR	A	138	55.576	59.832	15.706	1.00	0.00	C
	ATOM	919	CD1	TYR	A	138	55.322	58.928	16.734	1.00	0.00	C
	ATOM	920	CD2	TYR	A	138	56.800	59.752	15.043	1.00	0.00	C
	ATOM	921	CE1	TYR	A	138	56.261	57.964	17.091	1.00	0.00	C
	ATOM	922	CE2	TYR	A	138	57.748	58.789	15.395	1.00	0.00	C
15	ATOM	923	CZ	TYR	A	138	57.468	57.900	16.416	1.00	0.00	C
	ATOM	924	OH	TYR	A	138	58.383	56.930	16.757	1.00	0.00	O
	ATOM	925	N	HIS	A	139	56.117	63.523	15.047	1.00	0.00	N
	ATOM	926	CA	HIS	A	139	57.392	64.214	14.871	1.00	0.00	C
	ATOM	927	C	HIS	A	139	57.629	65.306	15.911	1.00	0.00	C
20	ATOM	928	O	HIS	A	139	58.763	65.734	16.119	1.00	0.00	O
	ATOM	929	CB	HIS	A	139	57.493	64.795	13.460	1.00	0.00	C
	ATOM	930	CG	HIS	A	139	57.671	63.756	12.395	1.00	0.00	C
	ATOM	931	ND1	HIS	A	139	58.778	62.935	12.335	1.00	0.00	N
	ATOM	932	CD2	HIS	A	139	56.880	63.398	11.355	1.00	0.00	C
25	ATOM	933	CE1	HIS	A	139	58.661	62.118	11.302	1.00	0.00	C
	ATOM	934	NE2	HIS	A	139	57.519	62.378	10.691	1.00	0.00	N
	ATOM	935	N	ASP	A	140	56.560	65.751	16.563	1.00	0.00	N
	ATOM	936	CA	ASP	A	140	56.663	66.780	17.594	1.00	0.00	C
	ATOM	937	C	ASP	A	140	56.880	66.170	18.983	1.00	0.00	C
30	ATOM	938	O	ASP	A	140	57.237	66.873	19.929	1.00	0.00	O
	ATOM	939	CB	ASP	A	140	55.403	67.649	17.596	1.00	0.00	C
	ATOM	940	CG	ASP	A	140	55.510	68.833	16.652	1.00	0.00	C
	ATOM	941	OD1	ASP	A	140	56.361	68.794	15.739	1.00	0.00	O
	ATOM	942	OD2	ASP	A	140	54.738	69.802	16.819	1.00	0.00	O
35	ATOM	943	N	LEU	A	141	56.672	64.861	19.097	1.00	0.00	N
	ATOM	944	CA	LEU	A	141	56.847	64.160	20.368	1.00	0.00	C
	ATOM	945	C	LEU	A	141	58.305	63.962	20.751	1.00	0.00	C
	ATOM	946	O	LEU	A	141	59.176	63.851	19.892	1.00	0.00	O
	ATOM	947	CB	LEU	A	141	56.188	62.779	20.321	1.00	0.00	C
40	ATOM	948	CG	LEU	A	141	54.670	62.624	20.382	1.00	0.00	C
	ATOM	949	CD1	LEU	A	141	54.324	61.135	20.287	1.00	0.00	C
	ATOM	950	CD2	LEU	A	141	54.132	63.209	21.679	1.00	0.00	C
	ATOM	951	N	GLY	A	142	58.563	63.916	22.054	1.00	0.00	N
	ATOM	952	CA	GLY	A	142	59.913	63.685	22.528	1.00	0.00	C
45	ATOM	953	C	GLY	A	142	60.196	62.205	22.351	1.00	0.00	C
	ATOM	954	O	GLY	A	142	59.265	61.411	22.206	1.00	0.00	O
	ATOM	955	N	GLU	A	143	61.469	61.825	22.370	1.00	0.00	N
	ATOM	956	CA	GLU	A	143	61.856	60.431	22.188	1.00	0.00	C
	ATOM	957	C	GLU	A	143	61.169	59.473	23.159	1.00	0.00	C
50	ATOM	958	O	GLU	A	143	60.744	58.387	22.767	1.00	0.00	O
	ATOM	959	CB	GLU	A	143	63.375	60.289	22.308	1.00	0.00	C
	ATOM	960	CG	GLU	A	143	63.914	58.936	21.867	1.00	0.00	C
	ATOM	961	CD	GLU	A	143	63.519	58.582	20.441	1.00	0.00	C
	ATOM	962	OE1	GLU	A	143	63.713	59.422	19.537	1.00	0.00	O
55	ATOM	963	OE2	GLU	A	143	63.017	57.460	20.224	1.00	0.00	O
	ATOM	964	N	ASN	A	144	61.059	59.871	24.421	1.00	0.00	N
	ATOM	965	CA	ASN	A	144	60.416	59.027	25.423	1.00	0.00	C
	ATOM	966	C	ASN	A	144	58.972	58.723	25.026	1.00	0.00	C
	ATOM	967	O	ASN	A	144	58.536	57.572	25.082	1.00	0.00	O
60	ATOM	968	CB	ASN	A	144	60.456	59.711	26.797	1.00	0.00	C
	ATOM	969	CG	ASN	A	144	59.678	58.946	27.859	1.00	0.00	C
	ATOM	970	OD1	ASN	A	144	58.443	58.917	27.845	1.00	0.00	O
	ATOM	971	ND2	ASN	A	144	60.399	58.319	28.786	1.00	0.00	N
	ATOM	972	N	LYS	A	145	58.240	59.755	24.614	1.00	0.00	N
	ATOM	973	CA	LYS	A	145	56.847	59.590	24.210	1.00	0.00	C

5	ATOM	974	C	LYS	A	145	56.698	58.798	22.912	1.00	0.00	C
	ATOM	975	O	LYS	A	145	55.735	58.046	22.752	1.00	0.00	O
	ATOM	976	CB	LYS	A	145	56.168	60.958	24.078	1.00	0.00	C
	ATOM	977	CG	LYS	A	145	55.887	61.635	25.417	1.00	0.00	C
	ATOM	978	CD	LYS	A	145	54.925	60.800	26.252	1.00	0.00	C
10	ATOM	979	CE	LYS	A	145	54.648	61.430	27.613	1.00	0.00	C
	ATOM	980	NZ	LYS	A	145	55.860	61.462	28.478	1.00	0.00	N
	ATOM	981	N	LYS	A	146	57.640	58.966	21.986	1.00	0.00	N
	ATOM	982	CA	LYS	A	146	57.589	58.225	20.728	1.00	0.00	C
	ATOM	983	C	LYS	A	146	57.650	56.734	21.036	1.00	0.00	C
15	ATOM	984	O	LYS	A	146	56.967	55.935	20.401	1.00	0.00	O
	ATOM	985	CB	LYS	A	146	58.761	58.602	19.810	1.00	0.00	C
	ATOM	986	CG	LYS	A	146	58.624	59.956	19.127	1.00	0.00	C
	ATOM	987	CD	LYS	A	146	59.760	60.201	18.141	1.00	0.00	C
	ATOM	988	CE	LYS	A	146	59.594	61.542	17.439	1.00	0.00	C
20	ATOM	989	NZ	LYS	A	146	60.713	61.808	16.502	1.00	0.00	N
	ATOM	990	N	LEU	A	147	58.470	56.369	22.019	1.00	0.00	N
	ATOM	991	CA	LEU	A	147	58.618	54.976	22.423	1.00	0.00	C
	ATOM	992	C	LEU	A	147	57.332	54.452	23.064	1.00	0.00	C
	ATOM	993	O	LEU	A	147	56.913	53.328	22.792	1.00	0.00	O
25	ATOM	994	CB	LEU	A	147	59.795	54.828	23.394	1.00	0.00	C
	ATOM	995	CG	LEU	A	147	61.174	55.065	22.765	1.00	0.00	C
	ATOM	996	CD1	LEU	A	147	62.267	54.955	23.819	1.00	0.00	C
	ATOM	997	CD2	LEU	A	147	61.404	54.043	21.659	1.00	0.00	C
	ATOM	998	N	GLN	A	148	56.707	55.258	23.917	1.00	0.00	N
30	ATOM	999	CA	GLN	A	148	55.456	54.838	24.541	1.00	0.00	C
	ATOM	1000	C	GLN	A	148	54.393	54.655	23.461	1.00	0.00	C
	ATOM	1001	O	GLN	A	148	53.578	53.734	23.525	1.00	0.00	O
	ATOM	1002	CB	GLN	A	148	54.961	55.874	25.552	1.00	0.00	C
	ATOM	1003	CG	GLN	A	148	55.689	55.857	26.884	1.00	0.00	C
35	ATOM	1004	CD	GLN	A	148	55.020	56.743	27.922	1.00	0.00	C
	ATOM	1005	OE1	GLN	A	148	55.426	56.768	29.086	1.00	0.00	O
	ATOM	1006	NE2	GLN	A	148	53.990	57.477	27.505	1.00	0.00	N
	ATOM	1007	N	MET	A	149	54.407	55.537	22.468	1.00	0.00	N
	ATOM	1008	CA	MET	A	149	53.434	55.467	21.385	1.00	0.00	C
40	ATOM	1009	C	MET	A	149	53.634	54.196	20.565	1.00	0.00	C
	ATOM	1010	O	MET	A	149	52.673	53.508	20.232	1.00	0.00	O
	ATOM	1011	CB	MET	A	149	53.554	56.697	20.481	1.00	0.00	C
	ATOM	1012	CG	MET	A	149	52.533	56.747	19.352	1.00	0.00	C
	ATOM	1013	SD	MET	A	149	50.823	56.818	19.930	1.00	0.00	S
45	ATOM	1014	CE	MET	A	149	50.571	58.585	20.073	1.00	0.00	C
	ATOM	1015	N	LYS	A	150	54.885	53.879	20.244	1.00	0.00	N
	ATOM	1016	CA	LYS	A	150	55.161	52.682	19.462	1.00	0.00	C
	ATOM	1017	C	LYS	A	150	54.741	51.429	20.215	1.00	0.00	C
	ATOM	1018	O	LYS	A	150	54.314	50.450	19.606	1.00	0.00	O
50	ATOM	1019	CB	LYS	A	150	56.650	52.601	19.104	1.00	0.00	C
	ATOM	1020	CG	LYS	A	150	57.115	53.724	18.190	1.00	0.00	C
	ATOM	1021	CD	LYS	A	150	58.623	53.714	17.990	1.00	0.00	C
	ATOM	1022	CE	LYS	A	150	59.076	52.493	17.214	1.00	0.00	C
	ATOM	1023	NZ	LYS	A	150	60.543	52.537	16.948	1.00	0.00	N
55	ATOM	1024	N	SER	A	151	54.839	51.464	21.542	1.00	0.00	N
	ATOM	1025	CA	SER	A	151	54.474	50.305	22.346	1.00	0.00	C
	ATOM	1026	C	SER	A	151	52.969	50.036	22.373	1.00	0.00	C
	ATOM	1027	O	SER	A	151	52.548	48.883	22.271	1.00	0.00	O
	ATOM	1028	CB	SER	A	151	55.002	50.454	23.778	1.00	0.00	C
60	ATOM	1029	OG	SER	A	151	54.275	51.437	24.486	1.00	0.00	O
	ATOM	1030	N	ILE	A	152	52.150	51.079	22.505	1.00	0.00	N
	ATOM	1031	CA	ILE	A	152	50.710	50.854	22.528	1.00	0.00	C
	ATOM	1032	C	ILE	A	152	50.178	50.469	21.147	1.00	0.00	C
	ATOM	1033	O	ILE	A	152	49.072	49.948	21.026	1.00	0.00	O
	ATOM	1034	CB	ILE	A	152	49.924	52.074	23.075	1.00	0.00	C

5	ATOM	1035	CG1	ILE	A	152	50.245	53.334	22.274	1.00	0.00	C
	ATOM	1036	CG2	ILE	A	152	50.249	52.274	24.549	1.00	0.00	C
	ATOM	1037	CD1	ILE	A	152	49.359	54.507	22.645	1.00	0.00	C
	ATOM	1038	N	VAL	A	153	50.965	50.723	20.106	1.00	0.00	N
	ATOM	1039	CA	VAL	A	153	50.562	50.343	18.753	1.00	0.00	C
10	ATOM	1040	C	VAL	A	153	50.959	48.881	18.580	1.00	0.00	C
	ATOM	1041	O	VAL	A	153	50.178	48.057	18.103	1.00	0.00	O
	ATOM	1042	CB	VAL	A	153	51.280	51.195	17.682	1.00	0.00	C
	ATOM	1043	CG1	VAL	A	153	51.068	50.590	16.295	1.00	0.00	C
	ATOM	1044	CG2	VAL	A	153	50.746	52.618	17.715	1.00	0.00	C
15	ATOM	1045	N	LYS	A	154	52.181	48.564	18.998	1.00	0.00	N
	ATOM	1046	CA	LYS	A	154	52.692	47.203	18.897	1.00	0.00	C
	ATOM	1047	C	LYS	A	154	51.832	46.218	19.692	1.00	0.00	C
	ATOM	1048	O	LYS	A	154	51.604	45.088	19.244	1.00	0.00	O
	ATOM	1049	CB	LYS	A	154	54.141	47.153	19.395	1.00	0.00	C
20	ATOM	1050	CG	LYS	A	154	54.883	45.879	19.009	1.00	0.00	C
	ATOM	1051	CD	LYS	A	154	56.371	45.971	19.327	1.00	0.00	C
	ATOM	1052	CE	LYS	A	154	56.650	45.772	20.811	1.00	0.00	C
	ATOM	1053	NZ	LYS	A	154	55.949	46.755	21.689	1.00	0.00	N
	ATOM	1054	N	ASN	A	155	51.344	46.643	20.857	1.00	0.00	N
25	ATOM	1055	CA	ASN	A	155	50.524	45.773	21.697	1.00	0.00	C
	ATOM	1056	C	ASN	A	155	49.050	45.705	21.292	1.00	0.00	C
	ATOM	1057	O	ASN	A	155	48.269	44.985	21.908	1.00	0.00	O
	ATOM	1058	CB	ASN	A	155	50.637	46.177	23.178	1.00	0.00	C
	ATOM	1059	CG	ASN	A	155	49.837	47.427	23.519	1.00	0.00	C
30	ATOM	1060	OD1	ASN	A	155	49.102	47.957	22.688	1.00	0.00	O
	ATOM	1061	ND2	ASN	A	155	49.973	47.898	24.757	1.00	0.00	N
	ATOM	1062	N	GLY	A	156	48.665	46.467	20.272	1.00	0.00	N
	ATOM	1063	CA	GLY	A	156	47.291	46.417	19.798	1.00	0.00	C
	ATOM	1064	C	GLY	A	156	46.253	47.362	20.380	1.00	0.00	C
35	ATOM	1065	O	GLY	A	156	45.080	47.277	20.006	1.00	0.00	O
	ATOM	1066	N	GLN	A	157	46.652	48.259	21.279	1.00	0.00	N
	ATOM	1067	CA	GLN	A	157	45.695	49.195	21.872	1.00	0.00	C
	ATOM	1068	C	GLN	A	157	45.308	50.318	20.916	1.00	0.00	C
	ATOM	1069	O	GLN	A	157	44.143	50.692	20.829	1.00	0.00	O
40	ATOM	1070	CB	GLN	A	157	46.254	49.811	23.147	1.00	0.00	C
	ATOM	1071	CG	GLN	A	157	46.313	48.867	24.328	1.00	0.00	C
	ATOM	1072	CD	GLN	A	157	46.577	49.619	25.611	1.00	0.00	C
	ATOM	1073	OE1	GLN	A	157	45.676	50.244	26.173	1.00	0.00	O
	ATOM	1074	NE2	GLN	A	157	47.818	49.589	26.065	1.00	0.00	N
45	ATOM	1075	N	LEU	A	158	46.299	50.884	20.236	1.00	0.00	N
	ATOM	1076	CA	LEU	A	158	46.047	51.938	19.266	1.00	0.00	C
	ATOM	1077	C	LEU	A	158	46.230	51.277	17.909	1.00	0.00	C
	ATOM	1078	O	LEU	A	158	47.308	50.772	17.598	1.00	0.00	O
	ATOM	1079	CB	LEU	A	158	47.042	53.093	19.440	1.00	0.00	C
50	ATOM	1080	CG	LEU	A	158	46.941	54.281	18.471	1.00	0.00	C
	ATOM	1081	CD1	LEU	A	158	47.444	53.885	17.092	1.00	0.00	C
	ATOM	1082	CD2	LEU	A	158	45.508	54.766	18.392	1.00	0.00	C
	ATOM	1083	N	GLU	A	159	45.171	51.274	17.107	1.00	0.00	N
	ATOM	1084	CA	GLU	A	159	45.230	50.638	15.801	1.00	0.00	C
55	ATOM	1085	C	GLU	A	159	44.890	51.595	14.670	1.00	0.00	C
	ATOM	1086	O	GLU	A	159	43.912	52.336	14.739	1.00	0.00	O
	ATOM	1087	CB	GLU	A	159	44.277	49.442	15.771	1.00	0.00	C
	ATOM	1088	CG	GLU	A	159	44.210	48.721	14.434	1.00	0.00	C
	ATOM	1089	CD	GLU	A	159	43.268	47.534	14.476	1.00	0.00	C
60	ATOM	1090	OE1	GLU	A	159	43.603	46.536	15.148	1.00	0.00	O
	ATOM	1091	OE2	GLU	A	159	42.191	47.604	13.844	1.00	0.00	O
	ATOM	1092	N	PHE	A	160	45.709	51.577	13.629	1.00	0.00	N
	ATOM	1093	CA	PHE	A	160	45.466	52.437	12.488	1.00	0.00	C
	ATOM	1094	C	PHE	A	160	44.548	51.735	11.509	1.00	0.00	C
	ATOM	1095	O	PHE	A	160	44.727	50.552	11.202	1.00	0.00	O

5	ATOM	1096	CB	PHE	A	160	46.781	52.812	11.808	1.00	0.00	C
	ATOM	1097	CG	PHE	A	160	47.707	53.593	12.692	1.00	0.00	C
	ATOM	1098	CD1	PHE	A	160	48.747	52.959	13.367	1.00	0.00	C
	ATOM	1099	CD2	PHE	A	160	47.508	54.956	12.892	1.00	0.00	C
	ATOM	1100	CE1	PHE	A	160	49.574	53.671	14.231	1.00	0.00	C
10	ATOM	1101	CE2	PHE	A	160	48.331	55.677	13.757	1.00	0.00	C
	ATOM	1102	CZ	PHE	A	160	49.362	55.032	14.425	1.00	0.00	C
	ATOM	1103	N	VAL	A	161	43.543	52.468	11.048	1.00	0.00	N
	ATOM	1104	CA	VAL	A	161	42.591	51.942	10.087	1.00	0.00	C
	ATOM	1105	C	VAL	A	161	42.805	52.718	8.791	1.00	0.00	C
15	ATOM	1106	O	VAL	A	161	42.882	53.952	8.800	1.00	0.00	O
	ATOM	1107	CB	VAL	A	161	41.138	52.085	10.605	1.00	0.00	C
	ATOM	1108	CG1	VAL	A	161	40.919	51.127	11.776	1.00	0.00	C
	ATOM	1109	CG2	VAL	A	161	40.870	53.519	11.058	1.00	0.00	C
	ATOM	1110	N	THR	A	162	42.914	51.976	7.690	1.00	0.00	N
20	ATOM	1111	CA	THR	A	162	43.179	52.519	6.358	1.00	0.00	C
	ATOM	1112	C	THR	A	162	44.641	52.973	6.314	1.00	0.00	C
	ATOM	1113	O	THR	A	162	45.451	52.417	5.572	1.00	0.00	O
	ATOM	1114	CB	THR	A	162	42.268	53.717	5.993	1.00	0.00	C
	ATOM	1115	OG1	THR	A	162	40.894	53.310	6.017	1.00	0.00	O
25	ATOM	1116	CG2	THR	A	162	42.598	54.212	4.583	1.00	0.00	C
	ATOM	1117	N	GLY	A	163	44.978	53.978	7.113	1.00	0.00	N
	ATOM	1118	CA	GLY	A	163	46.351	54.451	7.147	1.00	0.00	C
	ATOM	1119	C	GLY	A	163	46.721	55.412	6.034	1.00	0.00	C
	ATOM	1120	O	GLY	A	163	47.895	55.562	5.705	1.00	0.00	O
30	ATOM	1121	N	GLY	A	164	45.718	56.053	5.446	1.00	0.00	N
	ATOM	1122	CA	GLY	A	164	45.980	57.014	4.393	1.00	0.00	C
	ATOM	1123	C	GLY	A	164	46.271	58.380	4.989	1.00	0.00	C
	ATOM	1124	O	GLY	A	164	45.987	58.630	6.163	1.00	0.00	O
	ATOM	1125	N	TRP	A	165	46.847	59.267	4.186	1.00	0.00	N
35	ATOM	1126	CA	TRP	A	165	47.158	60.612	4.656	1.00	0.00	C
	ATOM	1127	C	TRP	A	165	45.848	61.228	5.155	1.00	0.00	C
	ATOM	1128	O	TRP	A	165	45.825	61.957	6.150	1.00	0.00	O
	ATOM	1129	CB	TRP	A	165	47.739	61.440	3.507	1.00	0.00	C
	ATOM	1130	CG	TRP	A	165	48.530	62.645	3.938	1.00	0.00	C
40	ATOM	1131	CD1	TRP	A	165	48.290	63.948	3.600	1.00	0.00	C
	ATOM	1132	CD2	TRP	A	165	49.717	62.654	4.745	1.00	0.00	C
	ATOM	1133	NE1	TRP	A	165	49.253	64.766	4.145	1.00	0.00	N
	ATOM	1134	CE2	TRP	A	165	50.141	64.000	4.851	1.00	0.00	C
	ATOM	1135	CE3	TRP	A	165	50.464	61.657	5.385	1.00	0.00	C
45	ATOM	1136	CZ2	TRP	A	165	51.282	64.375	5.575	1.00	0.00	C
	ATOM	1137	CZ3	TRP	A	165	51.602	62.033	6.107	1.00	0.00	C
	ATOM	1138	CH2	TRP	A	165	51.995	63.380	6.193	1.00	0.00	C
	ATOM	1139	N	VAL	A	166	44.756	60.904	4.467	1.00	0.00	N
	ATOM	1140	CA	VAL	A	166	43.425	61.402	4.822	1.00	0.00	C
50	ATOM	1141	C	VAL	A	166	42.395	60.293	4.591	1.00	0.00	C
	ATOM	1142	O	VAL	A	166	42.755	59.158	4.290	1.00	0.00	O
	ATOM	1143	CB	VAL	A	166	43.015	62.614	3.930	1.00	0.00	C
	ATOM	1144	CG1	VAL	A	166	44.058	63.731	4.035	1.00	0.00	C
	ATOM	1145	CG2	VAL	A	166	42.873	62.167	2.465	1.00	0.00	C
55	ATOM	1146	N	MET	A	167	41.122	60.635	4.773	1.00	0.00	N
	ATOM	1147	CA	MET	A	167	39.997	59.736	4.499	1.00	0.00	C
	ATOM	1148	C	MET	A	167	39.453	60.495	3.296	1.00	0.00	C
	ATOM	1149	O	MET	A	167	38.657	61.426	3.438	1.00	0.00	O
	ATOM	1150	CB	MET	A	167	38.981	59.749	5.641	1.00	0.00	C
60	ATOM	1151	CG	MET	A	167	37.730	58.923	5.362	1.00	0.00	C
	ATOM	1152	SD	MET	A	167	36.561	58.986	6.731	1.00	0.00	S
	ATOM	1153	CE	MET	A	167	37.551	58.164	8.032	1.00	0.00	C
	ATOM	1154	N	PRO	A	168	39.877	60.103	2.085	1.00	0.00	N
	ATOM	1155	CA	PRO	A	168	39.448	60.779	0.862	1.00	0.00	C
	ATOM	1156	C	PRO	A	168	38.006	60.758	0.399	1.00	0.00	C

	ATOM	1157	O	PRO	A	168	37.234	59.849	0.701	1.00	0.00	O
	ATOM	1158	CB	PRO	A	168	40.367	60.175	-0.193	1.00	0.00	C
	ATOM	1159	CG	PRO	A	168	40.431	58.739	0.248	1.00	0.00	C
	ATOM	1160	CD	PRO	A	168	40.629	58.872	1.763	1.00	0.00	C
5	ATOM	1161	N	ASP	A	169	37.672	61.800	-0.353	1.00	0.00	N
	ATOM	1162	CA	ASP	A	169	36.378	61.911	-0.987	1.00	0.00	C
	ATOM	1163	C	ASP	A	169	36.468	60.745	-1.965	1.00	0.00	C
	ATOM	1164	O	ASP	A	169	37.569	60.379	-2.382	1.00	0.00	O
10	ATOM	1165	CB	ASP	A	169	36.285	63.228	-1.758	1.00	0.00	C
	ATOM	1166	CG	ASP	A	169	35.167	63.227	-2.780	1.00	0.00	C
	ATOM	1167	OD1	ASP	A	169	34.076	62.709	-2.465	1.00	0.00	O
	ATOM	1168	OD2	ASP	A	169	35.374	63.756	-3.890	1.00	0.00	O
	ATOM	1169	N	GLU	A	170	35.336	60.152	-2.324	1.00	0.00	N
15	ATOM	1170	CA	GLU	A	170	35.367	59.028	-3.250	1.00	0.00	C
	ATOM	1171	C	GLU	A	170	34.658	59.327	-4.566	1.00	0.00	C
	ATOM	1172	O	GLU	A	170	34.630	58.489	-5.467	1.00	0.00	O
	ATOM	1173	CB	GLU	A	170	34.768	57.782	-2.575	1.00	0.00	C
	ATOM	1174	CG	GLU	A	170	35.635	57.268	-1.417	1.00	0.00	C
20	ATOM	1175	CD	GLU	A	170	35.037	56.070	-0.687	1.00	0.00	C
	ATOM	1176	OE1	GLU	A	170	34.240	55.330	-1.301	1.00	0.00	O
	ATOM	1177	OE2	GLU	A	170	35.387	55.860	0.499	1.00	0.00	O
	ATOM	1178	N	ALA	A	171	34.112	60.533	-4.687	1.00	0.00	N
	ATOM	1179	CA	ALA	A	171	33.397	60.918	-5.901	1.00	0.00	C
25	ATOM	1180	C	ALA	A	171	34.233	61.694	-6.920	1.00	0.00	C
	ATOM	1181	O	ALA	A	171	34.279	61.342	-8.099	1.00	0.00	O
	ATOM	1182	CB	ALA	A	171	32.164	61.733	-5.533	1.00	0.00	C
	ATOM	1183	N	ASN	A	172	34.888	62.752	-6.452	1.00	0.00	N
	ATOM	1184	CA	ASN	A	172	35.685	63.629	-7.305	1.00	0.00	C
30	ATOM	1185	C	ASN	A	172	37.145	63.220	-7.465	1.00	0.00	C
	ATOM	1186	O	ASN	A	172	37.806	63.594	-8.432	1.00	0.00	O
	ATOM	1187	CB	ASN	A	172	35.643	65.045	-6.733	1.00	0.00	C
	ATOM	1188	CG	ASN	A	172	34.231	65.585	-6.613	1.00	0.00	C
	ATOM	1189	OD1	ASN	A	172	33.572	65.854	-7.617	1.00	0.00	O
35	ATOM	1190	ND2	ASN	A	172	33.760	65.746	-5.379	1.00	0.00	N
	ATOM	1191	N	SER	A	173	37.643	62.455	-6.508	1.00	0.00	N
	ATOM	1192	CA	SER	A	173	39.040	62.031	-6.510	1.00	0.00	C
	ATOM	1193	C	SER	A	173	39.432	61.111	-7.660	1.00	0.00	C
	ATOM	1194	O	SER	A	173	38.671	60.220	-8.040	1.00	0.00	O
40	ATOM	1195	CB	SER	A	173	39.349	61.327	-5.193	1.00	0.00	C
	ATOM	1196	OG	SER	A	173	40.734	61.020	-5.115	1.00	0.00	O
	ATOM	1197	N	HIS	A	174	40.623	61.335	-8.215	1.00	0.00	N
	ATOM	1198	CA	HIS	A	174	41.116	60.474	-9.282	1.00	0.00	C
	ATOM	1199	C	HIS	A	174	41.786	59.293	-8.576	1.00	0.00	C
45	ATOM	1200	O	HIS	A	174	42.429	59.480	-7.545	1.00	0.00	O
	ATOM	1201	CB	HIS	A	174	42.127	61.214	-10.152	1.00	0.00	C
	ATOM	1202	CG	HIS	A	174	42.377	60.548	-11.466	1.00	0.00	C
	ATOM	1203	ND1	HIS	A	174	43.060	59.355	-11.576	1.00	0.00	N
	ATOM	1204	CD2	HIS	A	174	41.972	60.869	-12.717	1.00	0.00	C
50	ATOM	1205	CE1	HIS	A	174	43.060	58.969	-12.840	1.00	0.00	C
	ATOM	1206	NE2	HIS	A	174	42.406	59.870	-13.552	1.00	0.00	N
	ATOM	1207	N	TRP	A	175	41.642	58.085	-9.115	1.00	0.00	N
	ATOM	1208	CA	TRP	A	175	42.230	56.920	-8.461	1.00	0.00	C
	ATOM	1209	C	TRP	A	175	43.722	57.085	-8.224	1.00	0.00	C
55	ATOM	1210	O	TRP	A	175	44.254	56.588	-7.233	1.00	0.00	O
	ATOM	1211	CB	TRP	A	175	41.964	55.628	-9.254	1.00	0.00	C
	ATOM	1212	CG	TRP	A	175	42.795	55.448	-10.501	1.00	0.00	C
	ATOM	1213	CD1	TRP	A	175	42.468	55.823	-11.774	1.00	0.00	C
	ATOM	1214	CD2	TRP	A	175	44.088	54.834	-10.583	1.00	0.00	C
60	ATOM	1215	NE1	TRP	A	175	43.479	55.478	-12.646	1.00	0.00	N
	ATOM	1216	CE2	TRP	A	175	44.485	54.870	-11.939	1.00	0.00	C
	ATOM	1217	CE3	TRP	A	175	44.951	54.258	-9.638	1.00	0.00	C

5	ATOM	1218	CZ2	TRP	A	175	45.711	54.348	-12.378	1.00	0.00	C
	ATOM	1219	CZ3	TRP	A	175	46.170	53.739	-10.072	1.00	0.00	C
	ATOM	1220	CH2	TRP	A	175	46.537	53.789	-11.434	1.00	0.00	C
10	ATOM	1221	N	ARG	A	176	44.399	57.787	-9.126	1.00	0.00	N
	ATOM	1222	CA	ARG	A	176	45.830	58.000	-8.974	1.00	0.00	C
	ATOM	1223	C	ARG	A	176	46.145	58.754	-7.679	1.00	0.00	C
15	ATOM	1224	O	ARG	A	176	47.118	58.433	-6.987	1.00	0.00	O
	ATOM	1225	CB	ARG	A	176	46.374	58.756	-10.191	1.00	0.00	C
	ATOM	1226	CG	ARG	A	176	46.436	57.886	-11.445	1.00	0.00	C
20	ATOM	1227	CD	ARG	A	176	46.407	58.704	-12.723	1.00	0.00	C
	ATOM	1228	NE	ARG	A	176	47.504	59.663	-12.820	1.00	0.00	N
	ATOM	1229	CZ	ARG	A	176	47.662	60.498	-13.845	1.00	0.00	C
25	ATOM	1230	NH1	ARG	A	176	46.794	60.483	-14.852	1.00	0.00	N
	ATOM	1231	NH2	ARG	A	176	48.677	61.349	-13.861	1.00	0.00	N
	ATOM	1232	N	ASN	A	177	45.325	59.747	-7.341	1.00	0.00	N
30	ATOM	1233	CA	ASN	A	177	45.557	60.511	-6.116	1.00	0.00	C
	ATOM	1234	C	ASN	A	177	45.077	59.759	-4.877	1.00	0.00	C
	ATOM	1235	O	ASN	A	177	45.587	59.975	-3.773	1.00	0.00	O
35	ATOM	1236	CB	ASN	A	177	44.894	61.891	-6.200	1.00	0.00	C
	ATOM	1237	CG	ASN	A	177	45.567	62.787	-7.220	1.00	0.00	C
	ATOM	1238	OD1	ASN	A	177	46.750	62.621	-7.515	1.00	0.00	O
40	ATOM	1239	ND2	ASN	A	177	44.821	63.747	-7.758	1.00	0.00	N
	ATOM	1240	N	VAL	A	178	44.095	58.882	-5.055	1.00	0.00	N
	ATOM	1241	CA	VAL	A	178	43.618	58.078	-3.935	1.00	0.00	C
45	ATOM	1242	C	VAL	A	178	44.797	57.175	-3.558	1.00	0.00	C
	ATOM	1243	O	VAL	A	178	45.095	56.980	-2.378	1.00	0.00	O
	ATOM	1244	CB	VAL	A	178	42.404	57.198	-4.336	1.00	0.00	C
50	ATOM	1245	CG1	VAL	A	178	42.074	56.207	-3.215	1.00	0.00	C
	ATOM	1246	CG2	VAL	A	178	41.199	58.079	-4.631	1.00	0.00	C
	ATOM	1247	N	LEU	A	179	45.476	56.634	-4.570	1.00	0.00	N
55	ATOM	1248	CA	LEU	A	179	46.629	55.768	-4.326	1.00	0.00	C
	ATOM	1249	C	LEU	A	179	47.783	56.568	-3.739	1.00	0.00	C
	ATOM	1250	O	LEU	A	179	48.484	56.096	-2.839	1.00	0.00	O
60	ATOM	1251	CB	LEU	A	179	47.098	55.093	-5.622	1.00	0.00	C
	ATOM	1252	CG	LEU	A	179	48.400	54.279	-5.498	1.00	0.00	C
	ATOM	1253	CD1	LEU	A	179	48.236	53.163	-4.463	1.00	0.00	C
65	ATOM	1254	CD2	LEU	A	179	48.759	53.699	-6.860	1.00	0.00	C
	ATOM	1255	N	LEU	A	180	47.980	57.782	-4.250	1.00	0.00	N
	ATOM	1256	CA	LEU	A	180	49.060	58.635	-3.763	1.00	0.00	C
70	ATOM	1257	C	LEU	A	180	48.922	58.898	-2.261	1.00	0.00	C
	ATOM	1258	O	LEU	A	180	49.876	58.707	-1.499	1.00	0.00	O
	ATOM	1259	CB	LEU	A	180	49.066	59.970	-4.521	1.00	0.00	C
75	ATOM	1260	CG	LEU	A	180	50.209	60.929	-4.169	1.00	0.00	C
	ATOM	1261	CD1	LEU	A	180	51.515	60.375	-4.738	1.00	0.00	C
	ATOM	1262	CD2	LEU	A	180	49.928	62.322	-4.727	1.00	0.00	C
80	ATOM	1263	N	GLN	A	181	47.737	59.322	-1.825	1.00	0.00	N
	ATOM	1264	CA	GLN	A	181	47.544	59.619	-0.409	1.00	0.00	C
	ATOM	1265	C	GLN	A	181	47.588	58.377	0.476	1.00	0.00	C
85	ATOM	1266	O	GLN	A	181	48.068	58.446	1.605	1.00	0.00	O
	ATOM	1267	CB	GLN	A	181	46.247	60.419	-0.186	1.00	0.00	C
	ATOM	1268	CG	GLN	A	181	44.931	59.680	-0.425	1.00	0.00	C
90	ATOM	1269	CD	GLN	A	181	44.567	58.741	0.714	1.00	0.00	C
	ATOM	1270	OE1	GLN	A	181	44.821	59.037	1.887	1.00	0.00	O
	ATOM	1271	NE2	GLN	A	181	43.956	57.610	0.377	1.00	0.00	N
95	ATOM	1272	N	LEU	A	182	47.104	57.243	-0.029	1.00	0.00	N
	ATOM	1273	CA	LEU	A	182	47.151	56.011	0.750	1.00	0.00	C
	ATOM	1274	C	LEU	A	182	48.623	55.644	0.939	1.00	0.00	C
100	ATOM	1275	O	LEU	A	182	49.058	55.307	2.040	1.00	0.00	O
	ATOM	1276	CB	LEU	A	182	46.429	54.868	0.019	1.00	0.00	C
	ATOM	1277	CG	LEU	A	182	46.497	53.482	0.679	1.00	0.00	C
105	ATOM	1278	CD1	LEU	A	182	45.750	53.491	2.011	1.00	0.00	C

5	ATOM	1279	CD2	LEU	A	182	45.891	52.437	-0.261	1.00	0.00	C
	ATOM	1280	N	THR	A	183	49.389	55.735	-0.145	1.00	0.00	N
	ATOM	1281	CA	THR	A	183	50.810	55.408	-0.113	1.00	0.00	C
	ATOM	1282	C	THR	A	183	51.569	56.350	0.825	1.00	0.00	C
	ATOM	1283	O	THR	A	183	52.437	55.919	1.592	1.00	0.00	O
10	ATOM	1284	CB	THR	A	183	51.431	55.489	-1.539	1.00	0.00	C
	ATOM	1285	OG1	THR	A	183	50.708	54.626	-2.430	1.00	0.00	O
	ATOM	1286	CG2	THR	A	183	52.899	55.060	-1.513	1.00	0.00	C
	ATOM	1287	N	GLU	A	184	51.238	57.636	0.775	1.00	0.00	N
	ATOM	1288	CA	GLU	A	184	51.916	58.611	1.625	1.00	0.00	C
15	ATOM	1289	C	GLU	A	184	51.715	58.250	3.100	1.00	0.00	C
	ATOM	1290	O	GLU	A	184	52.663	58.257	3.888	1.00	0.00	O
	ATOM	1291	CB	GLU	A	184	51.376	60.017	1.342	1.00	0.00	C
	ATOM	1292	CG	GLU	A	184	52.229	61.165	1.883	1.00	0.00	C
	ATOM	1293	CD	GLU	A	184	53.624	61.226	1.269	1.00	0.00	C
20	ATOM	1294	OE1	GLU	A	184	53.778	60.909	0.070	1.00	0.00	O
	ATOM	1295	OE2	GLU	A	184	54.567	61.615	1.988	1.00	0.00	O
	ATOM	1296	N	GLY	A	185	50.479	57.921	3.463	1.00	0.00	N
	ATOM	1297	CA	GLY	A	185	50.182	57.560	4.840	1.00	0.00	C
	ATOM	1298	C	GLY	A	185	50.766	56.225	5.271	1.00	0.00	C
25	ATOM	1299	O	GLY	A	185	51.350	56.112	6.356	1.00	0.00	O
	ATOM	1300	N	GLN	A	186	50.623	55.204	4.432	1.00	0.00	N
	ATOM	1301	CA	GLN	A	186	51.142	53.886	4.788	1.00	0.00	C
	ATOM	1302	C	GLN	A	186	52.666	53.803	4.781	1.00	0.00	C
	ATOM	1303	O	GLN	A	186	53.254	53.043	5.551	1.00	0.00	O
30	ATOM	1304	CB	GLN	A	186	50.559	52.808	3.870	1.00	0.00	C
	ATOM	1305	CG	GLN	A	186	49.045	52.631	4.004	1.00	0.00	C
	ATOM	1306	CD	GLN	A	186	48.614	51.190	3.797	1.00	0.00	C
	ATOM	1307	OE1	GLN	A	186	49.190	50.476	2.981	1.00	0.00	O
	ATOM	1308	NE2	GLN	A	186	47.592	50.758	4.531	1.00	0.00	N
35	ATOM	1309	N	THR	A	187	53.312	54.574	3.916	1.00	0.00	N
	ATOM	1310	CA	THR	A	187	54.768	54.551	3.873	1.00	0.00	C
	ATOM	1311	C	THR	A	187	55.289	55.132	5.188	1.00	0.00	C
	ATOM	1312	O	THR	A	187	56.255	54.629	5.765	1.00	0.00	O
	ATOM	1313	CB	THR	A	187	55.297	55.355	2.673	1.00	0.00	C
40	ATOM	1314	OG1	THR	A	187	54.837	54.743	1.460	1.00	0.00	O
	ATOM	1315	CG2	THR	A	187	56.827	55.373	2.664	1.00	0.00	C
	ATOM	1316	N	TRP	A	188	54.631	56.179	5.675	1.00	0.00	N
	ATOM	1317	CA	TRP	A	188	55.034	56.790	6.937	1.00	0.00	C
	ATOM	1318	C	TRP	A	188	54.838	55.761	8.052	1.00	0.00	C
45	ATOM	1319	O	TRP	A	188	55.727	55.551	8.875	1.00	0.00	O
	ATOM	1320	CB	TRP	A	188	54.189	58.033	7.239	1.00	0.00	C
	ATOM	1321	CG	TRP	A	188	54.655	58.785	8.461	1.00	0.00	C
	ATOM	1322	CD1	TRP	A	188	55.574	59.798	8.503	1.00	0.00	C
	ATOM	1323	CD2	TRP	A	188	54.297	58.513	9.823	1.00	0.00	C
50	ATOM	1324	NE1	TRP	A	188	55.815	60.168	9.808	1.00	0.00	N
	ATOM	1325	CE2	TRP	A	188	55.044	59.395	10.637	1.00	0.00	C
	ATOM	1326	CE3	TRP	A	188	53.422	57.605	10.434	1.00	0.00	C
	ATOM	1327	CZ2	TRP	A	188	54.942	59.394	12.032	1.00	0.00	C
	ATOM	1328	CZ3	TRP	A	188	53.322	57.603	11.826	1.00	0.00	C
55	ATOM	1329	CH2	TRP	A	188	54.079	58.492	12.607	1.00	0.00	C
	ATOM	1330	N	LEU	A	189	53.672	55.115	8.071	1.00	0.00	N
	ATOM	1331	CA	LEU	A	189	53.375	54.113	9.094	1.00	0.00	C
	ATOM	1332	C	LEU	A	189	54.375	52.962	9.114	1.00	0.00	C
	ATOM	1333	O	LEU	A	189	54.793	52.515	10.185	1.00	0.00	O
60	ATOM	1334	CB	LEU	A	189	51.965	53.542	8.901	1.00	0.00	C
	ATOM	1335	CG	LEU	A	189	50.798	54.436	9.325	1.00	0.00	C
	ATOM	1336	CD1	LEU	A	189	49.476	53.723	9.014	1.00	0.00	C
	ATOM	1337	CD2	LEU	A	189	50.908	54.745	10.821	1.00	0.00	C
	ATOM	1338	N	LYS	A	190	54.753	52.470	7.939	1.00	0.00	N
	ATOM	1339	CA	LYS	A	190	55.704	51.365	7.885	1.00	0.00	C

5	ATOM	1340	C	LYS	A	190	57.047	51.789	8.466	1.00	0.00	C
	ATOM	1341	O	LYS	A	190	57.646	51.066	9.261	1.00	0.00	O
	ATOM	1342	CB	LYS	A	190	55.913	50.883	6.446	1.00	0.00	C
	ATOM	1343	CG	LYS	A	190	56.747	49.601	6.350	1.00	0.00	C
	ATOM	1344	CD	LYS	A	190	56.968	49.178	4.906	1.00	0.00	C
10	ATOM	1345	CE	LYS	A	190	57.527	47.761	4.815	1.00	0.00	C
	ATOM	1346	NZ	LYS	A	190	58.685	47.571	5.732	1.00	0.00	N
	ATOM	1347	N	GLN	A	191	57.511	52.967	8.071	1.00	0.00	N
	ATOM	1348	CA	GLN	A	191	58.791	53.471	8.542	1.00	0.00	C
	ATOM	1349	C	GLN	A	191	58.847	53.796	10.034	1.00	0.00	C
15	ATOM	1350	O	GLN	A	191	59.810	53.431	10.710	1.00	0.00	O
	ATOM	1351	CB	GLN	A	191	59.196	54.715	7.741	1.00	0.00	C
	ATOM	1352	CG	GLN	A	191	60.522	55.317	8.190	1.00	0.00	C
	ATOM	1353	CD	GLN	A	191	60.941	56.526	7.371	1.00	0.00	C
	ATOM	1354	OE1	GLN	A	191	61.982	57.132	7.635	1.00	0.00	O
20	ATOM	1355	NE2	GLN	A	191	60.135	56.883	6.373	1.00	0.00	N
	ATOM	1356	N	PHE	A	192	57.826	54.471	10.556	1.00	0.00	N
	ATOM	1357	CA	PHE	A	192	57.842	54.853	11.967	1.00	0.00	C
	ATOM	1358	C	PHE	A	192	57.044	54.008	12.965	1.00	0.00	C
	ATOM	1359	O	PHE	A	192	57.394	53.969	14.146	1.00	0.00	O
25	ATOM	1360	CB	PHE	A	192	57.422	56.319	12.110	1.00	0.00	C
	ATOM	1361	CG	PHE	A	192	58.327	57.278	11.395	1.00	0.00	C
	ATOM	1362	CD1	PHE	A	192	58.024	57.716	10.108	1.00	0.00	C
	ATOM	1363	CD2	PHE	A	192	59.497	57.727	11.997	1.00	0.00	C
	ATOM	1364	CE1	PHE	A	192	58.870	58.587	9.432	1.00	0.00	C
30	ATOM	1365	CE2	PHE	A	192	60.355	58.601	11.329	1.00	0.00	C
	ATOM	1366	CZ	PHE	A	192	60.041	59.032	10.044	1.00	0.00	C
	ATOM	1367	N	MET	A	193	55.985	53.343	12.512	1.00	0.00	N
	ATOM	1368	CA	MET	A	193	55.165	52.521	13.410	1.00	0.00	C
	ATOM	1369	C	MET	A	193	55.333	51.025	13.145	1.00	0.00	C
35	ATOM	1370	O	MET	A	193	54.859	50.190	13.920	1.00	0.00	O
	ATOM	1371	CB	MET	A	193	53.679	52.880	13.274	1.00	0.00	C
	ATOM	1372	CG	MET	A	193	53.268	54.222	13.862	1.00	0.00	C
	ATOM	1373	SD	MET	A	193	53.639	54.388	15.631	1.00	0.00	S
	ATOM	1374	CE	MET	A	193	54.987	55.512	15.487	1.00	0.00	C
40	ATOM	1375	N	ASN	A	194	55.997	50.698	12.041	1.00	0.00	N
	ATOM	1376	CA	ASN	A	194	56.234	49.312	11.654	1.00	0.00	C
	ATOM	1377	C	ASN	A	194	54.932	48.521	11.530	1.00	0.00	C
	ATOM	1378	O	ASN	A	194	54.839	47.377	11.975	1.00	0.00	O
	ATOM	1379	CB	ASN	A	194	57.168	48.640	12.669	1.00	0.00	C
45	ATOM	1380	CG	ASN	A	194	57.626	47.263	12.223	1.00	0.00	C
	ATOM	1381	OD1	ASN	A	194	57.761	47.001	11.026	1.00	0.00	O
	ATOM	1382	ND2	ASN	A	194	57.880	46.389	13.194	1.00	0.00	N
	ATOM	1383	N	VAL	A	195	53.920	49.140	10.932	1.00	0.00	N
	ATOM	1384	CA	VAL	A	195	52.633	48.478	10.741	1.00	0.00	C
50	ATOM	1385	C	VAL	A	195	52.002	48.928	9.428	1.00	0.00	C
	ATOM	1386	O	VAL	A	195	52.223	50.052	8.979	1.00	0.00	O
	ATOM	1387	CB	VAL	A	195	51.631	48.789	11.891	1.00	0.00	C
	ATOM	1388	CG1	VAL	A	195	52.186	48.303	13.228	1.00	0.00	C
	ATOM	1389	CG2	VAL	A	195	51.334	50.282	11.941	1.00	0.00	C
55	ATOM	1390	N	THR	A	196	51.230	48.032	8.821	1.00	0.00	N
	ATOM	1391	CA	THR	A	196	50.528	48.308	7.570	1.00	0.00	C
	ATOM	1392	C	THR	A	196	49.094	47.815	7.740	1.00	0.00	C
	ATOM	1393	O	THR	A	196	48.847	46.611	7.778	1.00	0.00	O
	ATOM	1394	CB	THR	A	196	51.159	47.554	6.373	1.00	0.00	C
60	ATOM	1395	OG1	THR	A	196	52.518	47.973	6.195	1.00	0.00	O
	ATOM	1396	CG2	THR	A	196	50.377	47.837	5.099	1.00	0.00	C
	ATOM	1397	N	PRO	A	197	48.130	48.743	7.852	1.00	0.00	N
	ATOM	1398	CA	PRO	A	197	46.722	48.371	8.020	1.00	0.00	C
	ATOM	1399	C	PRO	A	197	46.182	47.503	6.889	1.00	0.00	C
	ATOM	1400	O	PRO	A	197	46.539	47.693	5.724	1.00	0.00	O

5	ATOM	1401	CB	PRO	A	197	46.013	49.722	8.078	1.00	0.00	C
	ATOM	1402	CG	PRO	A	197	47.055	50.625	8.681	1.00	0.00	C
	ATOM	1403	CD	PRO	A	197	48.302	50.203	7.946	1.00	0.00	C
	ATOM	1404	N	THR	A	198	45.333	46.541	7.240	1.00	0.00	N
	ATOM	1405	CA	THR	A	198	44.717	45.674	6.244	1.00	0.00	C
	ATOM	1406	C	THR	A	198	43.206	45.838	6.323	1.00	0.00	C
	ATOM	1407	O	THR	A	198	42.465	45.141	5.634	1.00	0.00	O
10	ATOM	1408	CB	THR	A	198	45.064	44.185	6.454	1.00	0.00	C
	ATOM	1409	OG1	THR	A	198	44.607	43.763	7.741	1.00	0.00	O
	ATOM	1410	CG2	THR	A	198	46.567	43.964	6.330	1.00	0.00	C
	ATOM	1411	N	ALA	A	199	42.760	46.761	7.175	1.00	0.00	N
	ATOM	1412	CA	ALA	A	199	41.337	47.054	7.332	1.00	0.00	C
15	ATOM	1413	C	ALA	A	199	41.113	48.551	7.090	1.00	0.00	C
	ATOM	1414	O	ALA	A	199	41.811	49.389	7.665	1.00	0.00	O
	ATOM	1415	CB	ALA	A	199	40.862	46.664	8.738	1.00	0.00	C
	ATOM	1416	N	SER	A	200	40.140	48.882	6.248	1.00	0.00	N
	ATOM	1417	CA	SER	A	200	39.850	50.280	5.931	1.00	0.00	C
20	ATOM	1418	C	SER	A	200	38.615	50.799	6.658	1.00	0.00	C
	ATOM	1419	O	SER	A	200	37.648	50.059	6.881	1.00	0.00	O
	ATOM	1420	CB	SER	A	200	39.676	50.458	4.421	1.00	0.00	C
	ATOM	1421	OG	SER	A	200	39.526	51.827	4.088	1.00	0.00	O
	ATOM	1422	N	TRP	A	201	38.658	52.083	7.003	1.00	0.00	N
25	ATOM	1423	CA	TRP	A	201	37.596	52.760	7.743	1.00	0.00	C
	ATOM	1424	C	TRP	A	201	37.226	54.077	7.043	1.00	0.00	C
	ATOM	1425	O	TRP	A	201	37.994	55.036	7.063	1.00	0.00	O
	ATOM	1426	CB	TRP	A	201	38.112	52.994	9.176	1.00	0.00	C
	ATOM	1427	CG	TRP	A	201	37.299	53.854	10.114	1.00	0.00	C
30	ATOM	1428	CD1	TRP	A	201	37.455	55.195	10.339	1.00	0.00	C
	ATOM	1429	CD2	TRP	A	201	36.311	53.406	11.051	1.00	0.00	C
	ATOM	1430	NE1	TRP	A	201	36.635	55.606	11.363	1.00	0.00	N
	ATOM	1431	CE2	TRP	A	201	35.921	54.529	11.819	1.00	0.00	C
	ATOM	1432	CE3	TRP	A	201	35.719	52.163	11.320	1.00	0.00	C
35	ATOM	1433	CZ2	TRP	A	201	34.968	54.446	12.840	1.00	0.00	C
	ATOM	1434	CZ3	TRP	A	201	34.769	52.080	12.340	1.00	0.00	C
	ATOM	1435	CH2	TRP	A	201	34.404	53.219	13.087	1.00	0.00	C
	ATOM	1436	N	ALA	A	202	36.055	54.104	6.410	1.00	0.00	N
	ATOM	1437	CA	ALA	A	202	35.580	55.290	5.691	1.00	0.00	C
40	ATOM	1438	C	ALA	A	202	34.155	55.616	6.137	1.00	0.00	C
	ATOM	1439	O	ALA	A	202	33.186	55.168	5.527	1.00	0.00	O
	ATOM	1440	CB	ALA	A	202	35.619	55.034	4.185	1.00	0.00	C
	ATOM	1441	N	ILE	A	203	34.042	56.420	7.190	1.00	0.00	N
	ATOM	1442	CA	ILE	A	203	32.749	56.772	7.770	1.00	0.00	C
45	ATOM	1443	C	ILE	A	203	32.117	58.098	7.354	1.00	0.00	C
	ATOM	1444	O	ILE	A	203	30.941	58.323	7.642	1.00	0.00	O
	ATOM	1445	CB	ILE	A	203	32.830	56.768	9.321	1.00	0.00	C
	ATOM	1446	CG1	ILE	A	203	33.902	57.764	9.786	1.00	0.00	C
	ATOM	1447	CG2	ILE	A	203	33.146	55.351	9.830	1.00	0.00	C
50	ATOM	1448	CD1	ILE	A	203	33.977	57.955	11.299	1.00	0.00	C
	ATOM	1449	N	ASP	A	204	32.861	58.973	6.679	1.00	0.00	N
	ATOM	1450	CA	ASP	A	204	32.276	60.262	6.307	1.00	0.00	C
	ATOM	1451	C	ASP	A	204	32.157	60.645	4.827	1.00	0.00	C
	ATOM	1452	O	ASP	A	204	31.416	61.575	4.503	1.00	0.00	O
55	ATOM	1453	CB	ASP	A	204	32.981	61.400	7.056	1.00	0.00	C
	ATOM	1454	CG	ASP	A	204	32.053	62.585	7.330	1.00	0.00	C
	ATOM	1455	OD1	ASP	A	204	32.553	63.709	7.548	1.00	0.00	O
	ATOM	1456	OD2	ASP	A	204	30.819	62.398	7.344	1.00	0.00	O
	ATOM	1457	N	PRO	A	205	32.882	59.965	3.911	1.00	0.00	N
60	ATOM	1458	CA	PRO	A	205	32.733	60.362	2.501	1.00	0.00	C
	ATOM	1459	C	PRO	A	205	31.252	60.324	2.107	1.00	0.00	C
	ATOM	1460	O	PRO	A	205	30.514	59.447	2.552	1.00	0.00	O
	ATOM	1461	CB	PRO	A	205	33.569	59.321	1.759	1.00	0.00	C

5	ATOM	1462	CG	PRO	A	205	34.661	59.016	2.749	1.00	0.00	C
	ATOM	1463	CD	PRO	A	205	33.882	58.890	4.046	1.00	0.00	C
	ATOM	1464	N	PHE	A	206	30.826	61.265	1.266	1.00	0.00	N
	ATOM	1465	CA	PHE	A	206	29.418	61.368	0.866	1.00	0.00	C
	ATOM	1466	C	PHE	A	206	29.066	60.457	-0.311	1.00	0.00	C
10	ATOM	1467	O	PHE	A	206	28.873	60.914	-1.438	1.00	0.00	O
	ATOM	1468	CB	PHE	A	206	29.099	62.830	0.533	1.00	0.00	C
	ATOM	1469	CG	PHE	A	206	29.935	63.822	1.306	1.00	0.00	C
	ATOM	1470	CD1	PHE	A	206	30.173	63.645	2.668	1.00	0.00	C
	ATOM	1471	CD2	PHE	A	206	30.494	64.931	0.669	1.00	0.00	C
15	ATOM	1472	CE1	PHE	A	206	30.958	64.549	3.383	1.00	0.00	C
	ATOM	1473	CE2	PHE	A	206	31.280	65.844	1.377	1.00	0.00	C
	ATOM	1474	CZ	PHE	A	206	31.514	65.652	2.738	1.00	0.00	C
	ATOM	1475	N	GLY	A	207	28.947	59.165	-0.023	1.00	0.00	N
	ATOM	1476	CA	GLY	A	207	28.678	58.183	-1.058	1.00	0.00	C
20	ATOM	1477	C	GLY	A	207	29.978	57.408	-1.190	1.00	0.00	C
	ATOM	1478	O	GLY	A	207	31.035	57.938	-0.844	1.00	0.00	O
	ATOM	1479	N	HIS	A	208	29.920	56.173	-1.687	1.00	0.00	N
	ATOM	1480	CA	HIS	A	208	31.122	55.351	-1.806	1.00	0.00	C
	ATOM	1481	C	HIS	A	208	31.361	54.759	-3.187	1.00	0.00	C
25	ATOM	1482	O	HIS	A	208	30.419	54.418	-3.909	1.00	0.00	O
	ATOM	1483	CB	HIS	A	208	31.070	54.238	-0.760	1.00	0.00	C
	ATOM	1484	CG	HIS	A	208	31.161	54.739	0.648	1.00	0.00	C
	ATOM	1485	ND1	HIS	A	208	32.357	55.086	1.236	1.00	0.00	N
	ATOM	1486	CD2	HIS	A	208	30.203	54.976	1.575	1.00	0.00	C
30	ATOM	1487	CE1	HIS	A	208	32.133	55.513	2.466	1.00	0.00	C
	ATOM	1488	NE2	HIS	A	208	30.834	55.457	2.696	1.00	0.00	N
	ATOM	1489	N	SER	A	209	32.635	54.625	-3.537	1.00	0.00	N
	ATOM	1490	CA	SER	A	209	33.036	54.106	-4.841	1.00	0.00	C
	ATOM	1491	C	SER	A	209	33.793	52.783	-4.782	1.00	0.00	C
35	ATOM	1492	O	SER	A	209	34.595	52.560	-3.872	1.00	0.00	O
	ATOM	1493	CB	SER	A	209	33.916	55.138	-5.551	1.00	0.00	C
	ATOM	1494	OG	SER	A	209	34.484	54.592	-6.734	1.00	0.00	O
	ATOM	1495	N	PRO	A	210	33.552	51.893	-5.764	1.00	0.00	N
	ATOM	1496	CA	PRO	A	210	34.224	50.593	-5.819	1.00	0.00	C
40	ATOM	1497	C	PRO	A	210	35.704	50.764	-6.148	1.00	0.00	C
	ATOM	1498	O	PRO	A	210	36.479	49.812	-6.074	1.00	0.00	O
	ATOM	1499	CB	PRO	A	210	33.451	49.847	-6.907	1.00	0.00	C
	ATOM	1500	CG	PRO	A	210	33.031	50.950	-7.830	1.00	0.00	C
	ATOM	1501	CD	PRO	A	210	32.565	52.014	-6.853	1.00	0.00	C
45	ATOM	1502	N	THR	A	211	36.103	51.978	-6.518	1.00	0.00	N
	ATOM	1503	CA	THR	A	211	37.513	52.217	-6.789	1.00	0.00	C
	ATOM	1504	C	THR	A	211	38.309	51.961	-5.503	1.00	0.00	C
	ATOM	1505	O	THR	A	211	39.481	51.583	-5.553	1.00	0.00	O
	ATOM	1506	CB	THR	A	211	37.768	53.668	-7.260	1.00	0.00	C
50	ATOM	1507	OG1	THR	A	211	37.238	53.835	-8.580	1.00	0.00	O
	ATOM	1508	CG2	THR	A	211	39.265	53.974	-7.280	1.00	0.00	C
	ATOM	1509	N	MET	A	212	37.671	52.153	-4.351	1.00	0.00	N
	ATOM	1510	CA	MET	A	212	38.360	51.938	-3.078	1.00	0.00	C
	ATOM	1511	C	MET	A	212	38.742	50.467	-2.866	1.00	0.00	C
55	ATOM	1512	O	MET	A	212	39.913	50.154	-2.630	1.00	0.00	O
	ATOM	1513	CB	MET	A	212	37.514	52.452	-1.909	1.00	0.00	C
	ATOM	1514	CG	MET	A	212	37.203	53.944	-1.967	1.00	0.00	C
	ATOM	1515	SD	MET	A	212	38.661	55.001	-2.244	1.00	0.00	S
	ATOM	1516	CE	MET	A	212	39.452	54.939	-0.628	1.00	0.00	C
60	ATOM	1517	N	PRO	A	213	37.769	49.541	-2.930	1.00	0.00	N
	ATOM	1518	CA	PRO	A	213	38.188	48.148	-2.733	1.00	0.00	C
	ATOM	1519	C	PRO	A	213	39.170	47.704	-3.822	1.00	0.00	C
	ATOM	1520	O	PRO	A	213	40.036	46.862	-3.583	1.00	0.00	O
	ATOM	1521	CB	PRO	A	213	36.862	47.371	-2.754	1.00	0.00	C
	ATOM	1522	CG	PRO	A	213	35.922	48.287	-3.530	1.00	0.00	C

5	ATOM	1523	CD	PRO	A	213	36.302	49.649	-3.011	1.00	0.00	C
	ATOM	1524	N	TYR	A	214	39.038	48.274	-5.018	1.00	0.00	N
	ATOM	1525	CA	TYR	A	214	39.944	47.943	-6.117	1.00	0.00	C
	ATOM	1526	C	TYR	A	214	41.390	48.211	-5.698	1.00	0.00	C
	ATOM	1527	O	TYR	A	214	42.257	47.337	-5.793	1.00	0.00	O
10	ATOM	1528	CB	TYR	A	214	39.628	48.788	-7.346	1.00	0.00	C
	ATOM	1529	CG	TYR	A	214	40.553	48.531	-8.517	1.00	0.00	C
	ATOM	1530	CD1	TYR	A	214	40.385	47.413	-9.335	1.00	0.00	C
	ATOM	1531	CD2	TYR	A	214	41.579	49.422	-8.823	1.00	0.00	C
	ATOM	1532	CE1	TYR	A	214	41.215	47.197	-10.439	1.00	0.00	C
15	ATOM	1533	CE2	TYR	A	214	42.412	49.215	-9.918	1.00	0.00	C
	ATOM	1534	CZ	TYR	A	214	42.224	48.107	-10.725	1.00	0.00	C
	ATOM	1535	OH	TYR	A	214	43.026	47.934	-11.834	1.00	0.00	O
	ATOM	1536	N	ILE	A	215	41.640	49.435	-5.241	1.00	0.00	N
	ATOM	1537	CA	ILE	A	215	42.969	49.848	-4.804	1.00	0.00	C
20	ATOM	1538	C	ILE	A	215	43.399	49.135	-3.516	1.00	0.00	C
	ATOM	1539	O	ILE	A	215	44.529	48.660	-3.403	1.00	0.00	O
	ATOM	1540	CB	ILE	A	215	43.008	51.384	-4.567	1.00	0.00	C
	ATOM	1541	CG1	ILE	A	215	42.745	52.118	-5.885	1.00	0.00	C
	ATOM	1542	CG2	ILE	A	215	44.352	51.797	-3.972	1.00	0.00	C
25	ATOM	1543	CD1	ILE	A	215	42.721	53.637	-5.749	1.00	0.00	C
	ATOM	1544	N	LEU	A	216	42.494	49.062	-2.548	1.00	0.00	N
	ATOM	1545	CA	LEU	A	216	42.803	48.419	-1.273	1.00	0.00	C
	ATOM	1546	C	LEU	A	216	43.141	46.932	-1.412	1.00	0.00	C
	ATOM	1547	O	LEU	A	216	44.108	46.452	-0.817	1.00	0.00	O
30	ATOM	1548	CB	LEU	A	216	41.630	48.594	-0.300	1.00	0.00	C
	ATOM	1549	CG	LEU	A	216	41.247	50.039	0.061	1.00	0.00	C
	ATOM	1550	CD1	LEU	A	216	39.929	50.049	0.827	1.00	0.00	C
	ATOM	1551	CD2	LEU	A	216	42.365	50.678	0.891	1.00	0.00	C
	ATOM	1552	N	GLN	A	217	42.347	46.207	-2.197	1.00	0.00	N
35	ATOM	1553	CA	GLN	A	217	42.568	44.776	-2.388	1.00	0.00	C
	ATOM	1554	C	GLN	A	217	43.925	44.525	-3.051	1.00	0.00	C
	ATOM	1555	O	GLN	A	217	44.556	43.490	-2.826	1.00	0.00	O
	ATOM	1556	CB	GLN	A	217	41.418	44.191	-3.218	1.00	0.00	C
	ATOM	1557	CG	GLN	A	217	41.365	42.669	-3.307	1.00	0.00	C
40	ATOM	1558	CD	GLN	A	217	42.293	42.120	-4.364	1.00	0.00	C
	ATOM	1559	OE1	GLN	A	217	42.498	42.747	-5.401	1.00	0.00	O
	ATOM	1560	NE2	GLN	A	217	42.849	40.938	-4.115	1.00	0.00	N
	ATOM	1561	N	LYS	A	218	44.376	45.485	-3.856	1.00	0.00	N
	ATOM	1562	CA	LYS	A	218	45.666	45.386	-4.537	1.00	0.00	C
45	ATOM	1563	C	LYS	A	218	46.763	46.022	-3.681	1.00	0.00	C
	ATOM	1564	O	LYS	A	218	47.906	46.170	-4.114	1.00	0.00	O
	ATOM	1565	CB	LYS	A	218	45.598	46.082	-5.904	1.00	0.00	C
	ATOM	1566	CG	LYS	A	218	44.800	45.307	-6.956	1.00	0.00	C
	ATOM	1567	CD	LYS	A	218	44.608	46.122	-8.238	1.00	0.00	C
50	ATOM	1568	CE	LYS	A	218	44.225	45.238	-9.419	1.00	0.00	C
	ATOM	1569	NZ	LYS	A	218	43.094	44.308	-9.142	1.00	0.00	N
	ATOM	1570	N	SER	A	219	46.401	46.396	-2.460	1.00	0.00	N
	ATOM	1571	CA	SER	A	219	47.343	47.014	-1.541	1.00	0.00	C
	ATOM	1572	C	SER	A	219	47.419	46.231	-0.227	1.00	0.00	C
55	ATOM	1573	O	SER	A	219	47.749	46.782	0.827	1.00	0.00	O
	ATOM	1574	CB	SER	A	219	46.934	48.469	-1.288	1.00	0.00	C
	ATOM	1575	OG	SER	A	219	47.797	49.081	-0.345	1.00	0.00	O
	ATOM	1576	N	GLY	A	220	47.102	44.940	-0.305	1.00	0.00	N
	ATOM	1577	CA	GLY	A	220	47.173	44.079	0.865	1.00	0.00	C
60	ATOM	1578	C	GLY	A	220	45.984	44.045	1.810	1.00	0.00	C
	ATOM	1579	O	GLY	A	220	45.997	43.291	2.784	1.00	0.00	O
	ATOM	1580	N	PHE	A	221	44.948	44.831	1.539	1.00	0.00	N
	ATOM	1581	CA	PHE	A	221	43.795	44.848	2.433	1.00	0.00	C
	ATOM	1582	C	PHE	A	221	42.940	43.596	2.363	1.00	0.00	C
	ATOM	1583	O	PHE	A	221	42.891	42.918	1.340	1.00	0.00	O

5	ATOM	1584	CB	PHE	A	221	42.911	46.070	2.164	1.00	0.00	C
	ATOM	1585	CG	PHE	A	221	43.469	47.350	2.709	1.00	0.00	C
	ATOM	1586	CD1	PHE	A	221	44.587	47.941	2.127	1.00	0.00	C
	ATOM	1587	CD2	PHE	A	221	42.883	47.961	3.813	1.00	0.00	C
	ATOM	1588	CE1	PHE	A	221	45.115	49.126	2.637	1.00	0.00	C
10	ATOM	1589	CE2	PHE	A	221	43.404	49.150	4.334	1.00	0.00	C
	ATOM	1590	CZ	PHE	A	221	44.522	49.732	3.743	1.00	0.00	C
	ATOM	1591	N	LYS	A	222	42.262	43.305	3.468	1.00	0.00	N
	ATOM	1592	CA	LYS	A	222	41.390	42.147	3.550	1.00	0.00	C
	ATOM	1593	C	LYS	A	222	39.978	42.530	3.970	1.00	0.00	C
15	ATOM	1594	O	LYS	A	222	39.048	41.741	3.810	1.00	0.00	O
	ATOM	1595	CB	LYS	A	222	41.974	41.124	4.525	1.00	0.00	C
	ATOM	1596	CG	LYS	A	222	43.170	40.390	3.943	1.00	0.00	C
	ATOM	1597	CD	LYS	A	222	43.812	39.451	4.940	1.00	0.00	C
	ATOM	1598	CE	LYS	A	222	44.810	38.535	4.239	1.00	0.00	C
20	ATOM	1599	NZ	LYS	A	222	45.750	39.298	3.363	1.00	0.00	N
	ATOM	1600	N	ASN	A	223	39.819	43.746	4.493	1.00	0.00	N
	ATOM	1601	CA	ASN	A	223	38.511	44.222	4.940	1.00	0.00	C
	ATOM	1602	C	ASN	A	223	38.347	45.738	4.828	1.00	0.00	C
	ATOM	1603	O	ASN	A	223	39.322	46.483	4.892	1.00	0.00	O
25	ATOM	1604	CB	ASN	A	223	38.270	43.832	6.404	1.00	0.00	C
	ATOM	1605	CG	ASN	A	223	38.360	42.340	6.640	1.00	0.00	C
	ATOM	1606	OD1	ASN	A	223	39.390	41.826	7.096	1.00	0.00	O
	ATOM	1607	ND2	ASN	A	223	37.284	41.631	6.330	1.00	0.00	N
	ATOM	1608	N	MET	A	224	37.104	46.186	4.670	1.00	0.00	N
30	ATOM	1609	CA	MET	A	224	36.807	47.614	4.599	1.00	0.00	C
	ATOM	1610	C	MET	A	224	35.408	47.896	5.141	1.00	0.00	C
	ATOM	1611	O	MET	A	224	34.522	47.035	5.108	1.00	0.00	O
	ATOM	1612	CB	MET	A	224	36.922	48.137	3.166	1.00	0.00	C
	ATOM	1613	CG	MET	A	224	35.850	47.637	2.214	1.00	0.00	C
35	ATOM	1614	SD	MET	A	224	36.055	48.407	0.602	1.00	0.00	S
	ATOM	1615	CE	MET	A	224	35.417	50.048	0.921	1.00	0.00	C
	ATOM	1616	N	LEU	A	225	35.226	49.110	5.649	1.00	0.00	N
	ATOM	1617	CA	LEU	A	225	33.955	49.534	6.219	1.00	0.00	C
	ATOM	1618	C	LEU	A	225	33.527	50.873	5.628	1.00	0.00	C
40	ATOM	1619	O	LEU	A	225	34.351	51.769	5.456	1.00	0.00	O
	ATOM	1620	CB	LEU	A	225	34.096	49.651	7.739	1.00	0.00	C
	ATOM	1621	CG	LEU	A	225	32.938	50.271	8.531	1.00	0.00	C
	ATOM	1622	CD1	LEU	A	225	32.940	49.699	9.937	1.00	0.00	C
	ATOM	1623	CD2	LEU	A	225	33.064	51.808	8.553	1.00	0.00	C
45	ATOM	1624	N	ILE	A	226	32.239	50.999	5.317	1.00	0.00	N
	ATOM	1625	CA	ILE	A	226	31.697	52.231	4.749	1.00	0.00	C
	ATOM	1626	C	ILE	A	226	30.439	52.632	5.518	1.00	0.00	C
	ATOM	1627	O	ILE	A	226	29.857	51.808	6.228	1.00	0.00	O
	ATOM	1628	CB	ILE	A	226	31.368	52.058	3.244	1.00	0.00	C
50	ATOM	1629	CG1	ILE	A	226	30.308	50.972	3.049	1.00	0.00	C
	ATOM	1630	CG2	ILE	A	226	32.642	51.695	2.479	1.00	0.00	C
	ATOM	1631	CD1	ILE	A	226	29.889	50.776	1.595	1.00	0.00	C
	ATOM	1632	N	GLN	A	227	30.014	53.886	5.377	1.00	0.00	N
	ATOM	1633	CA	GLN	A	227	28.848	54.367	6.115	1.00	0.00	C
55	ATOM	1634	C	GLN	A	227	27.809	55.189	5.351	1.00	0.00	C
	ATOM	1635	O	GLN	A	227	26.613	54.893	5.409	1.00	0.00	O
	ATOM	1636	CB	GLN	A	227	29.332	55.171	7.330	1.00	0.00	C
	ATOM	1637	CG	GLN	A	227	28.377	56.258	7.841	1.00	0.00	C
	ATOM	1638	CD	GLN	A	227	27.056	55.721	8.361	1.00	0.00	C
60	ATOM	1639	OE1	GLN	A	227	26.954	54.563	8.765	1.00	0.00	O
	ATOM	1640	NE2	GLN	A	227	26.037	56.577	8.376	1.00	0.00	N
	ATOM	1641	N	ARG	A	228	28.249	56.227	4.646	1.00	0.00	N
	ATOM	1642	CA	ARG	A	228	27.298	57.072	3.944	1.00	0.00	C
	ATOM	1643	C	ARG	A	228	26.756	56.523	2.632	1.00	0.00	C
	ATOM	1644	O	ARG	A	228	27.318	56.746	1.560	1.00	0.00	O

5	ATOM	1645	CB	ARG	A	228	27.887	58.472	3.731	1.00	0.00	C
	ATOM	1646	CG	ARG	A	228	28.057	59.260	5.029	1.00	0.00	C
	ATOM	1647	CD	ARG	A	228	28.403	60.729	4.778	1.00	0.00	C
	ATOM	1648	NE	ARG	A	228	28.639	61.461	6.027	1.00	0.00	N
	ATOM	1649	CZ	ARG	A	228	27.683	61.924	6.831	1.00	0.00	C
10	ATOM	1650	NH1	ARG	A	228	26.401	61.743	6.526	1.00	0.00	N
	ATOM	1651	NH2	ARG	A	228	28.007	62.560	7.953	1.00	0.00	N
	ATOM	1652	N	THR	A	229	25.652	55.791	2.739	1.00	0.00	N
	ATOM	1653	CA	THR	A	229	24.977	55.233	1.579	1.00	0.00	C
	ATOM	1654	C	THR	A	229	23.509	55.617	1.731	1.00	0.00	C
15	ATOM	1655	O	THR	A	229	23.038	55.854	2.849	1.00	0.00	O
	ATOM	1656	CB	THR	A	229	25.130	53.688	1.504	1.00	0.00	C
	ATOM	1657	OG1	THR	A	229	24.551	53.078	2.665	1.00	0.00	O
	ATOM	1658	CG2	THR	A	229	26.609	53.310	1.419	1.00	0.00	C
	ATOM	1659	N	HIS	A	230	22.798	55.694	0.611	1.00	0.00	N
20	ATOM	1660	CA	HIS	A	230	21.383	56.077	0.594	1.00	0.00	C
	ATOM	1661	C	HIS	A	230	20.573	55.338	1.661	1.00	0.00	C
	ATOM	1662	O	HIS	A	230	20.679	54.120	1.797	1.00	0.00	O
	ATOM	1663	CB	HIS	A	230	20.804	55.798	-0.799	1.00	0.00	C
	ATOM	1664	CG	HIS	A	230	19.543	56.549	-1.099	1.00	0.00	C
25	ATOM	1665	ND1	HIS	A	230	18.378	56.370	-0.385	1.00	0.00	N
	ATOM	1666	CD2	HIS	A	230	19.265	57.476	-2.047	1.00	0.00	C
	ATOM	1667	CE1	HIS	A	230	17.436	57.155	-0.879	1.00	0.00	C
	ATOM	1668	NE2	HIS	A	230	17.948	57.837	-1.888	1.00	0.00	N
	ATOM	1669	N	TYR	A	231	19.756	56.074	2.415	1.00	0.00	N
30	ATOM	1670	CA	TYR	A	231	18.958	55.448	3.466	1.00	0.00	C
	ATOM	1671	C	TYR	A	231	18.081	54.310	2.940	1.00	0.00	C
	ATOM	1672	O	TYR	A	231	17.788	53.361	3.666	1.00	0.00	O
	ATOM	1673	CB	TYR	A	231	18.105	56.497	4.200	1.00	0.00	C
	ATOM	1674	CG	TYR	A	231	17.122	57.265	3.336	1.00	0.00	C
35	ATOM	1675	CD1	TYR	A	231	15.842	56.767	3.085	1.00	0.00	C
	ATOM	1676	CD2	TYR	A	231	17.473	58.497	2.777	1.00	0.00	C
	ATOM	1677	CE1	TYR	A	231	14.935	57.477	2.301	1.00	0.00	C
	ATOM	1678	CE2	TYR	A	231	16.574	59.214	1.992	1.00	0.00	C
	ATOM	1679	CZ	TYR	A	231	15.308	58.698	1.758	1.00	0.00	C
40	ATOM	1680	OH	TYR	A	231	14.420	59.401	0.980	1.00	0.00	O
	ATOM	1681	N	SER	A	232	17.673	54.395	1.679	1.00	0.00	N
	ATOM	1682	CA	SER	A	232	16.846	53.345	1.089	1.00	0.00	C
	ATOM	1683	C	SER	A	232	17.649	52.069	0.857	1.00	0.00	C
	ATOM	1684	O	SER	A	232	17.119	50.964	0.970	1.00	0.00	O
45	ATOM	1685	CB	SER	A	232	16.238	53.821	-0.233	1.00	0.00	C
	ATOM	1686	OG	SER	A	232	15.249	54.809	-0.007	1.00	0.00	O
	ATOM	1687	N	VAL	A	233	18.930	52.227	0.533	1.00	0.00	N
	ATOM	1688	CA	VAL	A	233	19.807	51.085	0.298	1.00	0.00	C
	ATOM	1689	C	VAL	A	233	20.094	50.365	1.618	1.00	0.00	C
50	ATOM	1690	O	VAL	A	233	20.097	49.132	1.680	1.00	0.00	O
	ATOM	1691	CB	VAL	A	233	21.134	51.537	-0.354	1.00	0.00	C
	ATOM	1692	CG1	VAL	A	233	22.119	50.375	-0.405	1.00	0.00	C
	ATOM	1693	CG2	VAL	A	233	20.860	52.054	-1.763	1.00	0.00	C
	ATOM	1694	N	LYS	A	234	20.327	51.140	2.670	1.00	0.00	N
55	ATOM	1695	CA	LYS	A	234	20.582	50.573	3.988	1.00	0.00	C
	ATOM	1696	C	LYS	A	234	19.394	49.707	4.407	1.00	0.00	C
	ATOM	1697	O	LYS	A	234	19.567	48.587	4.884	1.00	0.00	O
	ATOM	1698	CB	LYS	A	234	20.799	51.695	5.013	1.00	0.00	C
	ATOM	1699	CG	LYS	A	234	22.143	52.414	4.889	1.00	0.00	C
60	ATOM	1700	CD	LYS	A	234	22.200	53.646	5.791	1.00	0.00	C
	ATOM	1701	CE	LYS	A	234	23.575	54.324	5.751	1.00	0.00	C
	ATOM	1702	NZ	LYS	A	234	24.576	53.708	6.681	1.00	0.00	N
	ATOM	1703	N	LYS	A	235	18.186	50.229	4.213	1.00	0.00	N
	ATOM	1704	CA	LYS	A	235	16.974	49.497	4.578	1.00	0.00	C
	ATOM	1705	C	LYS	A	235	16.845	48.206	3.777	1.00	0.00	C

5	ATOM	1706	O	LYS	A	235	16.595	47.138	4.337	1.00	0.00	O
	ATOM	1707	CB	LYS	A	235	15.739	50.373	4.351	1.00	0.00	C
	ATOM	1708	CG	LYS	A	235	14.445	49.774	4.890	1.00	0.00	C
	ATOM	1709	CD	LYS	A	235	13.270	50.689	4.608	1.00	0.00	C
	ATOM	1710	CE	LYS	A	235	11.977	50.108	5.154	1.00	0.00	C
	ATOM	1711	NZ	LYS	A	235	10.807	50.957	4.792	1.00	0.00	N
	ATOM	1712	N	GLU	A	236	17.025	48.307	2.464	1.00	0.00	N
	ATOM	1713	CA	GLU	A	236	16.926	47.149	1.580	1.00	0.00	C
10	ATOM	1714	C	GLU	A	236	17.941	46.058	1.928	1.00	0.00	C
	ATOM	1715	O	GLU	A	236	17.584	44.888	2.073	1.00	0.00	O
	ATOM	1716	CB	GLU	A	236	17.121	47.587	0.125	1.00	0.00	C
	ATOM	1717	CG	GLU	A	236	16.922	46.474	-0.897	1.00	0.00	C
	ATOM	1718	CD	GLU	A	236	15.468	46.035	-1.029	1.00	0.00	C
	ATOM	1719	OE1	GLU	A	236	15.200	45.126	-1.840	1.00	0.00	O
15	ATOM	1720	OE2	GLU	A	236	14.594	46.596	-0.332	1.00	0.00	O
	ATOM	1721	N	LEU	A	237	19.210	46.432	2.063	1.00	0.00	N
	ATOM	1722	CA	LEU	A	237	20.236	45.450	2.387	1.00	0.00	C
	ATOM	1723	C	LEU	A	237	20.065	44.897	3.800	1.00	0.00	C
20	ATOM	1724	O	LEU	A	237	20.318	43.717	4.043	1.00	0.00	O
	ATOM	1725	CB	LEU	A	237	21.632	46.056	2.220	1.00	0.00	C
	ATOM	1726	CG	LEU	A	237	21.974	46.530	0.802	1.00	0.00	C
	ATOM	1727	CD1	LEU	A	237	23.357	47.152	0.803	1.00	0.00	C
	ATOM	1728	CD2	LEU	A	237	21.912	45.359	-0.178	1.00	0.00	C
25	ATOM	1729	N	ALA	A	238	19.630	45.742	4.729	1.00	0.00	N
	ATOM	1730	CA	ALA	A	238	19.428	45.297	6.102	1.00	0.00	C
	ATOM	1731	C	ALA	A	238	18.379	44.184	6.150	1.00	0.00	C
	ATOM	1732	O	ALA	A	238	18.564	43.172	6.833	1.00	0.00	O
	ATOM	1733	CB	ALA	A	238	18.988	46.465	6.976	1.00	0.00	C
30	ATOM	1734	N	GLN	A	239	17.286	44.374	5.420	1.00	0.00	N
	ATOM	1735	CA	GLN	A	239	16.203	43.394	5.393	1.00	0.00	C
	ATOM	1736	C	GLN	A	239	16.652	42.029	4.871	1.00	0.00	C
	ATOM	1737	O	GLN	A	239	16.079	41.002	5.229	1.00	0.00	O
	ATOM	1738	CB	GLN	A	239	15.037	43.922	4.548	1.00	0.00	C
35	ATOM	1739	CG	GLN	A	239	14.452	45.234	5.069	1.00	0.00	C
	ATOM	1740	CD	GLN	A	239	13.274	45.734	4.248	1.00	0.00	C
	ATOM	1741	OE1	GLN	A	239	13.349	45.823	3.021	1.00	0.00	O
	ATOM	1742	NE2	GLN	A	239	12.181	46.072	4.926	1.00	0.00	N
	ATOM	1743	N	GLN	A	240	17.679	42.017	4.028	1.00	0.00	N
40	ATOM	1744	CA	GLN	A	240	18.187	40.766	3.472	1.00	0.00	C
	ATOM	1745	C	GLN	A	240	19.494	40.349	4.138	1.00	0.00	C
	ATOM	1746	O	GLN	A	240	20.113	39.364	3.735	1.00	0.00	O
	ATOM	1747	CB	GLN	A	240	18.416	40.921	1.968	1.00	0.00	C
	ATOM	1748	CG	GLN	A	240	17.193	41.409	1.212	1.00	0.00	C
	ATOM	1749	CD	GLN	A	240	16.058	40.409	1.242	1.00	0.00	C
45	ATOM	1750	OE1	GLN	A	240	14.902	40.762	1.011	1.00	0.00	O
	ATOM	1751	NE2	GLN	A	240	16.382	39.149	1.514	1.00	0.00	N
	ATOM	1752	N	ARG	A	241	19.894	41.088	5.170	1.00	0.00	N
	ATOM	1753	CA	ARG	A	241	21.148	40.831	5.871	1.00	0.00	C
50	ATOM	1754	C	ARG	A	241	22.282	40.786	4.852	1.00	0.00	C
	ATOM	1755	O	ARG	A	241	23.090	39.853	4.821	1.00	0.00	O
	ATOM	1756	CB	ARG	A	241	21.085	39.519	6.665	1.00	0.00	C
	ATOM	1757	CG	ARG	A	241	20.051	39.539	7.786	1.00	0.00	C
	ATOM	1758	CD	ARG	A	241	20.262	38.400	8.770	1.00	0.00	C
55	ATOM	1759	NE	ARG	A	241	20.254	37.096	8.113	1.00	0.00	N
	ATOM	1760	CZ	ARG	A	241	20.626	35.960	8.699	1.00	0.00	C
	ATOM	1761	NH1	ARG	A	241	21.038	35.964	9.962	1.00	0.00	N
	ATOM	1762	NH2	ARG	A	241	20.595	34.821	8.019	1.00	0.00	N
	ATOM	1763	N	GLN	A	242	22.324	41.810	4.006	1.00	0.00	N
60	ATOM	1764	CA	GLN	A	242	23.355	41.916	2.980	1.00	0.00	C
	ATOM	1765	C	GLN	A	242	24.195	43.177	3.199	1.00	0.00	C
	ATOM	1766	O	GLN	A	242	24.716	43.751	2.245	1.00	0.00	O

	ATOM	1767	CB	GLN	A	242	22.713	41.952	1.586	1.00	0.00	C
	ATOM	1768	CG	GLN	A	242	21.904	40.708	1.238	1.00	0.00	C
	ATOM	1769	CD	GLN	A	242	21.185	40.834	-0.093	1.00	0.00	C
5	ATOM	1770	OE1	GLN	A	242	20.633	41.885	-0.410	1.00	0.00	O
	ATOM	1771	NE2	GLN	A	242	21.179	39.756	-0.873	1.00	0.00	N
	ATOM	1772	N	LEU	A	243	24.320	43.596	4.460	1.00	0.00	N
	ATOM	1773	CA	LEU	A	243	25.106	44.779	4.810	1.00	0.00	C
	ATOM	1774	C	LEU	A	243	26.598	44.454	4.787	1.00	0.00	C
10	ATOM	1775	O	LEU	A	243	27.441	45.351	4.712	1.00	0.00	O
	ATOM	1776	CB	LEU	A	243	24.691	45.310	6.186	1.00	0.00	C
	ATOM	1777	CG	LEU	A	243	23.302	45.958	6.224	1.00	0.00	C
	ATOM	1778	CD1	LEU	A	243	22.897	46.244	7.667	1.00	0.00	C
	ATOM	1779	CD2	LEU	A	243	23.319	47.251	5.397	1.00	0.00	C
15	ATOM	1780	N	GLU	A	244	26.918	43.167	4.875	1.00	0.00	N
	ATOM	1781	CA	GLU	A	244	28.302	42.720	4.788	1.00	0.00	C
	ATOM	1782	C	GLU	A	244	28.326	41.894	3.521	1.00	0.00	C
	ATOM	1783	O	GLU	A	244	27.502	40.995	3.340	1.00	0.00	O
	ATOM	1784	CB	GLU	A	244	28.703	41.897	6.016	1.00	0.00	C
20	ATOM	1785	CG	GLU	A	244	28.890	42.775	7.251	1.00	0.00	C
	ATOM	1786	CD	GLU	A	244	29.325	42.005	8.476	1.00	0.00	C
	ATOM	1787	OE1	GLU	A	244	28.809	40.891	8.697	1.00	0.00	O
	ATOM	1788	OE2	GLU	A	244	30.175	42.526	9.227	1.00	0.00	O
	ATOM	1789	N	PHE	A	245	29.259	42.214	2.631	1.00	0.00	N
25	ATOM	1790	CA	PHE	A	245	29.333	41.533	1.349	1.00	0.00	C
	ATOM	1791	C	PHE	A	245	30.734	41.530	0.758	1.00	0.00	C
	ATOM	1792	O	PHE	A	245	31.611	42.272	1.198	1.00	0.00	O
	ATOM	1793	CB	PHE	A	245	28.368	42.225	0.377	1.00	0.00	C
	ATOM	1794	CG	PHE	A	245	28.491	43.730	0.370	1.00	0.00	C
30	ATOM	1795	CD1	PHE	A	245	29.473	44.364	-0.388	1.00	0.00	C
	ATOM	1796	CD2	PHE	A	245	27.643	44.511	1.155	1.00	0.00	C
	ATOM	1797	CE1	PHE	A	245	29.610	45.767	-0.363	1.00	0.00	C
	ATOM	1798	CE2	PHE	A	245	27.770	45.907	1.190	1.00	0.00	C
	ATOM	1799	CZ	PHE	A	245	28.755	46.534	0.429	1.00	0.00	C
35	ATOM	1800	N	LEU	A	246	30.936	40.676	-0.238	1.00	0.00	N
	ATOM	1801	CA	LEU	A	246	32.211	40.590	-0.931	1.00	0.00	C
	ATOM	1802	C	LEU	A	246	32.062	41.504	-2.141	1.00	0.00	C
	ATOM	1803	O	LEU	A	246	31.450	41.138	-3.144	1.00	0.00	O
	ATOM	1804	CB	LEU	A	246	32.481	39.143	-1.351	1.00	0.00	C
40	ATOM	1805	CG	LEU	A	246	32.796	38.222	-0.162	1.00	0.00	C
	ATOM	1806	CD1	LEU	A	246	32.737	36.755	-0.577	1.00	0.00	C
	ATOM	1807	CD2	LEU	A	246	34.176	38.572	0.374	1.00	0.00	C
	ATOM	1808	N	TRP	A	247	32.616	42.707	-2.022	1.00	0.00	N
	ATOM	1809	CA	TRP	A	247	32.528	43.724	-3.065	1.00	0.00	C
45	ATOM	1810	C	TRP	A	247	33.547	43.514	-4.182	1.00	0.00	C
	ATOM	1811	O	TRP	A	247	34.751	43.703	-3.977	1.00	0.00	O
	ATOM	1812	CB	TRP	A	247	32.732	45.107	-2.429	1.00	0.00	C
	ATOM	1813	CG	TRP	A	247	32.228	46.274	-3.234	1.00	0.00	C
	ATOM	1814	CD1	TRP	A	247	31.636	46.236	-4.465	1.00	0.00	C
50	ATOM	1815	CD2	TRP	A	247	32.233	47.651	-2.835	1.00	0.00	C
	ATOM	1816	NE1	TRP	A	247	31.266	47.507	-4.857	1.00	0.00	N
	ATOM	1817	CE2	TRP	A	247	31.621	48.392	-3.874	1.00	0.00	C
	ATOM	1818	CE3	TRP	A	247	32.694	48.331	-1.700	1.00	0.00	C
	ATOM	1819	CZ2	TRP	A	247	31.458	49.782	-3.809	1.00	0.00	C
55	ATOM	1820	CZ3	TRP	A	247	32.533	49.713	-1.636	1.00	0.00	C
	ATOM	1821	CH2	TRP	A	247	31.919	50.422	-2.685	1.00	0.00	C
	ATOM	1822	N	ARG	A	248	33.062	43.119	-5.358	1.00	0.00	N
	ATOM	1823	CA	ARG	A	248	33.929	42.908	-6.511	1.00	0.00	C
	ATOM	1824	C	ARG	A	248	33.619	43.976	-7.558	1.00	0.00	C
60	ATOM	1825	O	ARG	A	248	32.567	44.618	-7.509	1.00	0.00	O
	ATOM	1826	CB	ARG	A	248	33.700	41.521	-7.126	1.00	0.00	C
	ATOM	1827	CG	ARG	A	248	32.350	41.366	-7.822	1.00	0.00	C

5	ATOM	1889	N	GLY	A	255	35.891	37.039	-9.632	1.00	0.00	N
	ATOM	1890	CA	GLY	A	255	35.788	37.509	-8.262	1.00	0.00	C
	ATOM	1891	C	GLY	A	255	37.108	37.716	-7.535	1.00	0.00	C
	ATOM	1892	O	GLY	A	255	37.122	37.866	-6.315	1.00	0.00	O
	ATOM	1893	N	ASP	A	256	38.216	37.737	-8.270	1.00	0.00	N
	ATOM	1894	CA	ASP	A	256	39.525	37.923	-7.647	1.00	0.00	C
	ATOM	1895	C	ASP	A	256	39.742	39.323	-7.075	1.00	0.00	C
	ATOM	1896	O	ASP	A	256	40.667	39.537	-6.296	1.00	0.00	O
10	ATOM	1897	CB	ASP	A	256	40.648	37.616	-8.644	1.00	0.00	C
	ATOM	1898	CG	ASP	A	256	40.647	36.171	-9.100	1.00	0.00	C
	ATOM	1899	OD1	ASP	A	256	40.503	35.273	-8.240	1.00	0.00	O
	ATOM	1900	OD2	ASP	A	256	40.801	35.934	-10.317	1.00	0.00	O
	ATOM	1901	N	THR	A	257	38.900	40.276	-7.460	1.00	0.00	N
15	ATOM	1902	CA	THR	A	257	39.037	41.641	-6.954	1.00	0.00	C
	ATOM	1903	C	THR	A	257	38.231	41.850	-5.672	1.00	0.00	C
	ATOM	1904	O	THR	A	257	38.333	42.898	-5.027	1.00	0.00	O
	ATOM	1905	CB	THR	A	257	38.545	42.670	-7.982	1.00	0.00	C
	ATOM	1906	OG1	THR	A	257	37.141	42.487	-8.200	1.00	0.00	O
20	ATOM	1907	CG2	THR	A	257	39.290	42.506	-9.299	1.00	0.00	C
	ATOM	1908	N	ALA	A	258	37.437	40.845	-5.311	1.00	0.00	N
	ATOM	1909	CA	ALA	A	258	36.579	40.907	-4.135	1.00	0.00	C
	ATOM	1910	C	ALA	A	258	37.266	41.290	-2.828	1.00	0.00	C
	ATOM	1911	O	ALA	A	258	38.355	40.813	-2.519	1.00	0.00	O
25	ATOM	1912	CB	ALA	A	258	35.852	39.576	-3.956	1.00	0.00	C
	ATOM	1913	N	LEU	A	259	36.600	42.154	-2.066	1.00	0.00	N
	ATOM	1914	CA	LEU	A	259	37.091	42.605	-0.767	1.00	0.00	C
	ATOM	1915	C	LEU	A	259	35.900	42.632	0.187	1.00	0.00	C
	ATOM	1916	O	LEU	A	259	34.874	43.245	-0.110	1.00	0.00	O
30	ATOM	1917	CB	LEU	A	259	37.700	44.009	-0.866	1.00	0.00	C
	ATOM	1918	CG	LEU	A	259	38.382	44.511	0.410	1.00	0.00	C
	ATOM	1919	CD1	LEU	A	259	39.566	43.601	0.743	1.00	0.00	C
	ATOM	1920	CD2	LEU	A	259	38.849	45.957	0.226	1.00	0.00	C
	ATOM	1921	N	PHE	A	260	36.030	41.957	1.326	1.00	0.00	N
35	ATOM	1922	CA	PHE	A	260	34.948	41.921	2.304	1.00	0.00	C
	ATOM	1923	C	PHE	A	260	34.625	43.336	2.774	1.00	0.00	C
	ATOM	1924	O	PHE	A	260	35.505	44.075	3.225	1.00	0.00	O
	ATOM	1925	CB	PHE	A	260	35.342	41.053	3.501	1.00	0.00	C
	ATOM	1926	CG	PHE	A	260	34.242	40.879	4.503	1.00	0.00	C
40	ATOM	1927	CD1	PHE	A	260	33.245	39.925	4.304	1.00	0.00	C
	ATOM	1928	CD2	PHE	A	260	34.187	41.681	5.636	1.00	0.00	C
	ATOM	1929	CE1	PHE	A	260	32.211	39.775	5.220	1.00	0.00	C
	ATOM	1930	CE2	PHE	A	260	33.158	41.542	6.560	1.00	0.00	C
	ATOM	1931	CZ	PHE	A	260	32.166	40.588	6.353	1.00	0.00	C
45	ATOM	1932	N	THR	A	261	33.355	43.708	2.680	1.00	0.00	N
	ATOM	1933	CA	THR	A	261	32.931	45.046	3.062	1.00	0.00	C
	ATOM	1934	C	THR	A	261	31.795	45.042	4.074	1.00	0.00	C
	ATOM	1935	O	THR	A	261	30.841	44.277	3.952	1.00	0.00	O
	ATOM	1936	CB	THR	A	261	32.463	45.837	1.824	1.00	0.00	C
50	ATOM	1937	OG1	THR	A	261	33.507	45.842	0.841	1.00	0.00	O
	ATOM	1938	CG2	THR	A	261	32.117	47.277	2.198	1.00	0.00	C
	ATOM	1939	N	HIS	A	262	31.908	45.919	5.066	1.00	0.00	N
	ATOM	1940	CA	HIS	A	262	30.893	46.069	6.096	1.00	0.00	C
	ATOM	1941	C	HIS	A	262	30.269	47.450	5.946	1.00	0.00	C
55	ATOM	1942	O	HIS	A	262	30.961	48.462	6.059	1.00	0.00	O
	ATOM	1943	CB	HIS	A	262	31.521	45.971	7.487	1.00	0.00	C
	ATOM	1944	CG	HIS	A	262	30.584	46.329	8.600	1.00	0.00	C
	ATOM	1945	ND1	HIS	A	262	29.955	45.381	9.378	1.00	0.00	N
	ATOM	1946	CD2	HIS	A	262	30.172	47.532	9.069	1.00	0.00	C
60	ATOM	1947	CE1	HIS	A	262	29.200	45.984	10.280	1.00	0.00	C
	ATOM	1948	NE2	HIS	A	262	29.314	47.289	10.115	1.00	0.00	N
	ATOM	1949	N	MET	A	263	28.968	47.491	5.684	1.00	0.00	N

5	ATOM	1950	CA	MET	A	263	28.269	48.760	5.556	1.00	0.00	C
	ATOM	1951	C	MET	A	263	27.521	48.991	6.863	1.00	0.00	C
	ATOM	1952	O	MET	A	263	26.763	48.125	7.308	1.00	0.00	O
	ATOM	1953	CB	MET	A	263	27.259	48.717	4.404	1.00	0.00	C
	ATOM	1954	CG	MET	A	263	26.485	50.025	4.205	1.00	0.00	C
10	ATOM	1955	SD	MET	A	263	25.054	49.854	3.084	1.00	0.00	S
	ATOM	1956	CE	MET	A	263	25.878	49.605	1.504	1.00	0.00	C
	ATOM	1957	N	MET	A	264	27.745	50.141	7.490	1.00	0.00	N
	ATOM	1958	CA	MET	A	264	27.043	50.451	8.728	1.00	0.00	C
	ATOM	1959	C	MET	A	264	25.579	50.606	8.322	1.00	0.00	C
15	ATOM	1960	O	MET	A	264	25.280	51.049	7.213	1.00	0.00	O
	ATOM	1961	CB	MET	A	264	27.635	51.710	9.364	1.00	0.00	C
	ATOM	1962	CG	MET	A	264	29.037	51.446	9.918	1.00	0.00	C
	ATOM	1963	SD	MET	A	264	29.959	52.912	10.446	1.00	0.00	S
	ATOM	1964	CE	MET	A	264	28.964	53.477	11.815	1.00	0.00	C
20	ATOM	1965	N	PRO	A	265	24.646	50.244	9.214	1.00	0.00	N
	ATOM	1966	CA	PRO	A	265	23.211	50.315	8.928	1.00	0.00	C
	ATOM	1967	C	PRO	A	265	22.429	51.590	9.187	1.00	0.00	C
	ATOM	1968	O	PRO	A	265	21.340	51.770	8.634	1.00	0.00	O
	ATOM	1969	CB	PRO	A	265	22.664	49.172	9.767	1.00	0.00	C
25	ATOM	1970	CG	PRO	A	265	23.451	49.352	11.044	1.00	0.00	C
	ATOM	1971	CD	PRO	A	265	24.879	49.679	10.558	1.00	0.00	C
	ATOM	1972	N	PHE	A	266	22.974	52.480	10.000	1.00	0.00	N
	ATOM	1973	CA	PHE	A	266	22.229	53.668	10.362	1.00	0.00	C
	ATOM	1974	C	PHE	A	266	22.601	55.022	9.747	1.00	0.00	C
30	ATOM	1975	O	PHE	A	266	23.522	55.139	8.937	1.00	0.00	O
	ATOM	1976	CB	PHE	A	266	22.188	53.722	11.892	1.00	0.00	C
	ATOM	1977	CG	PHE	A	266	21.653	52.446	12.521	1.00	0.00	C
	ATOM	1978	CD1	PHE	A	266	22.244	51.906	13.661	1.00	0.00	C
	ATOM	1979	CD2	PHE	A	266	20.559	51.785	11.959	1.00	0.00	C
35	ATOM	1980	CE1	PHE	A	266	21.752	50.724	14.234	1.00	0.00	C
	ATOM	1981	CE2	PHE	A	266	20.058	50.604	12.522	1.00	0.00	C
	ATOM	1982	CZ	PHE	A	266	20.655	50.072	13.660	1.00	0.00	C
	ATOM	1983	N	TYR	A	267	21.838	56.034	10.145	1.00	0.00	N
	ATOM	1984	CA	TYR	A	267	21.953	57.410	9.659	1.00	0.00	C
40	ATOM	1985	C	TYR	A	267	23.291	58.117	9.865	1.00	0.00	C
	ATOM	1986	O	TYR	A	267	23.696	58.941	9.040	1.00	0.00	O
	ATOM	1987	CB	TYR	A	267	20.828	58.229	10.301	1.00	0.00	C
	ATOM	1988	CG	TYR	A	267	20.881	59.726	10.097	1.00	0.00	C
	ATOM	1989	CD1	TYR	A	267	20.521	60.304	8.882	1.00	0.00	C
45	ATOM	1990	CD2	TYR	A	267	21.244	60.570	11.147	1.00	0.00	C
	ATOM	1991	CE1	TYR	A	267	20.513	61.698	8.719	1.00	0.00	C
	ATOM	1992	CE2	TYR	A	267	21.243	61.954	10.995	1.00	0.00	C
	ATOM	1993	CZ	TYR	A	267	20.875	62.510	9.785	1.00	0.00	C
	ATOM	1994	OH	TYR	A	267	20.857	63.879	9.651	1.00	0.00	O
50	ATOM	1995	N	SER	A	268	23.976	57.803	10.956	1.00	0.00	N
	ATOM	1996	CA	SER	A	268	25.245	58.459	11.243	1.00	0.00	C
	ATOM	1997	C	SER	A	268	26.227	57.552	11.973	1.00	0.00	C
	ATOM	1998	O	SER	A	268	25.868	56.461	12.425	1.00	0.00	O
	ATOM	1999	CB	SER	A	268	24.977	59.717	12.077	1.00	0.00	C
55	ATOM	2000	OG	SER	A	268	26.170	60.276	12.592	1.00	0.00	O
	ATOM	2001	N	TYR	A	269	27.474	58.007	12.076	1.00	0.00	N
	ATOM	2002	CA	TYR	A	269	28.500	57.252	12.778	1.00	0.00	C
	ATOM	2003	C	TYR	A	269	28.622	57.740	14.221	1.00	0.00	C
	ATOM	2004	O	TYR	A	269	29.445	57.228	14.978	1.00	0.00	O
60	ATOM	2005	CB	TYR	A	269	29.857	57.386	12.069	1.00	0.00	C
	ATOM	2006	CG	TYR	A	269	30.306	58.815	11.846	1.00	0.00	C
	ATOM	2007	CD1	TYR	A	269	30.721	59.618	12.911	1.00	0.00	C
	ATOM	2008	CD2	TYR	A	269	30.287	59.374	10.567	1.00	0.00	C
	ATOM	2009	CE1	TYR	A	269	31.104	60.950	12.708	1.00	0.00	C
	ATOM	2010	CE2	TYR	A	269	30.665	60.701	10.352	1.00	0.00	C

5	ATOM	2011	CZ	TYR	A	269	31.068	61.482	11.422	1.00	0.00	C
	ATOM	2012	OH	TYR	A	269	31.402	62.800	11.205	1.00	0.00	O
	ATOM	2013	N	ASP	A	270	27.817	58.731	14.605	1.00	0.00	N
	ATOM	2014	CA	ASP	A	270	27.893	59.225	15.980	1.00	0.00	C
	ATOM	2015	C	ASP	A	270	27.310	58.186	16.933	1.00	0.00	C
10	ATOM	2016	O	ASP	A	270	26.658	57.236	16.501	1.00	0.00	O
	ATOM	2017	CB	ASP	A	270	27.196	60.591	16.144	1.00	0.00	C
	ATOM	2018	CG	ASP	A	270	25.702	60.554	15.860	1.00	0.00	C
	ATOM	2019	OD1	ASP	A	270	25.104	59.457	15.796	1.00	0.00	O
	ATOM	2020	OD2	ASP	A	270	25.120	61.655	15.721	1.00	0.00	O
15	ATOM	2021	N	ILE	A	271	27.553	58.351	18.226	1.00	0.00	N
	ATOM	2022	CA	ILE	A	271	27.080	57.366	19.187	1.00	0.00	C
	ATOM	2023	C	ILE	A	271	25.567	57.124	19.164	1.00	0.00	C
	ATOM	2024	O	ILE	A	271	25.124	55.979	19.239	1.00	0.00	O
	ATOM	2025	CB	ILE	A	271	27.585	57.718	20.606	1.00	0.00	C
20	ATOM	2026	CG1	ILE	A	271	29.119	57.658	20.612	1.00	0.00	C
	ATOM	2027	CG2	ILE	A	271	27.045	56.718	21.628	1.00	0.00	C
	ATOM	2028	CD1	ILE	A	271	29.776	58.225	21.863	1.00	0.00	C
	ATOM	2029	N	PRO	A	272	24.755	58.187	19.043	1.00	0.00	N
	ATOM	2030	CA	PRO	A	272	23.306	57.961	19.013	1.00	0.00	C
25	ATOM	2031	C	PRO	A	272	22.861	57.025	17.881	1.00	0.00	C
	ATOM	2032	O	PRO	A	272	21.816	56.387	17.979	1.00	0.00	O
	ATOM	2033	CB	PRO	A	272	22.740	59.369	18.856	1.00	0.00	C
	ATOM	2034	CG	PRO	A	272	23.741	60.208	19.599	1.00	0.00	C
	ATOM	2035	CD	PRO	A	272	25.059	59.627	19.135	1.00	0.00	C
30	ATOM	2036	N	HIS	A	273	23.653	56.937	16.812	1.00	0.00	N
	ATOM	2037	CA	HIS	A	273	23.301	56.075	15.682	1.00	0.00	C
	ATOM	2038	C	HIS	A	273	24.229	54.880	15.459	1.00	0.00	C
	ATOM	2039	O	HIS	A	273	24.338	54.373	14.338	1.00	0.00	O
	ATOM	2040	CB	HIS	A	273	23.217	56.901	14.391	1.00	0.00	C
35	ATOM	2041	CG	HIS	A	273	22.162	57.964	14.428	1.00	0.00	C
	ATOM	2042	ND1	HIS	A	273	22.362	59.193	15.019	1.00	0.00	N
	ATOM	2043	CD2	HIS	A	273	20.879	57.962	13.993	1.00	0.00	C
	ATOM	2044	CE1	HIS	A	273	21.249	59.901	14.949	1.00	0.00	C
	ATOM	2045	NE2	HIS	A	273	20.333	59.176	14.330	1.00	0.00	N
40	ATOM	2046	N	THR	A	274	24.887	54.419	16.520	1.00	0.00	N
	ATOM	2047	CA	THR	A	274	25.783	53.276	16.394	1.00	0.00	C
	ATOM	2048	C	THR	A	274	25.588	52.156	17.423	1.00	0.00	C
	ATOM	2049	O	THR	A	274	26.159	51.078	17.268	1.00	0.00	O
	ATOM	2050	CB	THR	A	274	27.269	53.727	16.409	1.00	0.00	C
45	ATOM	2051	OG1	THR	A	274	27.480	54.679	17.456	1.00	0.00	O
	ATOM	2052	CG2	THR	A	274	27.646	54.350	15.074	1.00	0.00	C
	ATOM	2053	N	CYS	A	275	24.786	52.388	18.462	1.00	0.00	N
	ATOM	2054	CA	CYS	A	275	24.564	51.344	19.468	1.00	0.00	C
	ATOM	2055	C	CYS	A	275	23.375	50.457	19.108	1.00	0.00	C
50	ATOM	2056	O	CYS	A	275	23.299	49.296	19.521	1.00	0.00	O
	ATOM	2057	CB	CYS	A	275	24.327	51.967	20.848	1.00	0.00	C
	ATOM	2058	SG	CYS	A	275	22.589	52.094	21.403	1.00	0.00	S
	ATOM	2059	N	GLY	A	276	22.450	51.016	18.338	1.00	0.00	N
	ATOM	2060	CA	GLY	A	276	21.260	50.288	17.941	1.00	0.00	C
55	ATOM	2061	C	GLY	A	276	20.342	51.180	17.126	1.00	0.00	C
	ATOM	2062	O	GLY	A	276	20.715	52.314	16.817	1.00	0.00	O
	ATOM	2063	N	PRO	A	277	19.130	50.709	16.778	1.00	0.00	N
	ATOM	2064	CA	PRO	A	277	18.130	51.438	15.988	1.00	0.00	C
	ATOM	2065	C	PRO	A	277	17.466	52.657	16.624	1.00	0.00	C
60	ATOM	2066	O	PRO	A	277	16.883	53.477	15.916	1.00	0.00	O
	ATOM	2067	CB	PRO	A	277	17.103	50.356	15.662	1.00	0.00	C
	ATOM	2068	CG	PRO	A	277	17.124	49.525	16.904	1.00	0.00	C
	ATOM	2069	CD	PRO	A	277	18.610	49.384	17.165	1.00	0.00	C
	ATOM	2070	N	ASP	A	278	17.543	52.782	17.946	1.00	0.00	N
	ATOM	2071	CA	ASP	A	278	16.896	53.903	18.630	1.00	0.00	C

5	ATOM	2072	C	ASP	A	278	17.872	54.940	19.175	1.00	0.00	C
	ATOM	2073	O	ASP	A	278	18.487	54.739	20.221	1.00	0.00	O
	ATOM	2074	CB	ASP	A	278	16.027	53.383	19.781	1.00	0.00	C
	ATOM	2075	CG	ASP	A	278	15.096	54.448	20.335	1.00	0.00	C
	ATOM	2076	OD1	ASP	A	278	15.253	55.634	19.970	1.00	0.00	O
10	ATOM	2077	OD2	ASP	A	278	14.209	54.098	21.138	1.00	0.00	O
	ATOM	2078	N	PRO	A	279	18.011	56.077	18.478	1.00	0.00	N
	ATOM	2079	CA	PRO	A	279	18.927	57.132	18.925	1.00	0.00	C
	ATOM	2080	C	PRO	A	279	18.575	57.727	20.289	1.00	0.00	C
	ATOM	2081	O	PRO	A	279	19.450	58.222	20.997	1.00	0.00	O
15	ATOM	2082	CB	PRO	A	279	18.851	58.159	17.792	1.00	0.00	C
	ATOM	2083	CG	PRO	A	279	17.461	57.974	17.260	1.00	0.00	C
	ATOM	2084	CD	PRO	A	279	17.323	56.470	17.235	1.00	0.00	C
	ATOM	2085	N	LYS	A	280	17.299	57.678	20.662	1.00	0.00	N
	ATOM	2086	CA	LYS	A	280	16.886	58.217	21.954	1.00	0.00	C
20	ATOM	2087	C	LYS	A	280	17.499	57.389	23.077	1.00	0.00	C
	ATOM	2088	O	LYS	A	280	17.776	57.901	24.163	1.00	0.00	O
	ATOM	2089	CB	LYS	A	280	15.361	58.211	22.084	1.00	0.00	C
	ATOM	2090	CG	LYS	A	280	14.861	58.895	23.350	1.00	0.00	C
	ATOM	2091	CD	LYS	A	280	13.348	58.830	23.464	1.00	0.00	C
25	ATOM	2092	CE	LYS	A	280	12.876	57.405	23.700	1.00	0.00	C
	ATOM	2093	NZ	LYS	A	280	13.443	56.828	24.961	1.00	0.00	N
	ATOM	2094	N	VAL	A	281	17.708	56.104	22.813	1.00	0.00	N
	ATOM	2095	CA	VAL	A	281	18.306	55.217	23.804	1.00	0.00	C
	ATOM	2096	C	VAL	A	281	19.831	55.282	23.699	1.00	0.00	C
30	ATOM	2097	O	VAL	A	281	20.530	55.439	24.699	1.00	0.00	O
	ATOM	2098	CB	VAL	A	281	17.850	53.751	23.594	1.00	0.00	C
	ATOM	2099	CG1	VAL	A	281	18.589	52.829	24.555	1.00	0.00	C
	ATOM	2100	CG2	VAL	A	281	16.341	53.636	23.801	1.00	0.00	C
	ATOM	2101	N	CYS	A	282	20.344	55.166	22.478	1.00	0.00	N
35	ATOM	2102	CA	CYS	A	282	21.786	55.201	22.261	1.00	0.00	C
	ATOM	2103	C	CYS	A	282	22.430	56.486	22.768	1.00	0.00	C
	ATOM	2104	O	CYS	A	282	23.555	56.468	23.277	1.00	0.00	O
	ATOM	2105	CB	CYS	A	282	22.100	55.031	20.775	1.00	0.00	C
	ATOM	2106	SG	CYS	A	282	21.727	53.385	20.093	1.00	0.00	S
40	ATOM	2107	N	CYS	A	283	21.721	57.603	22.638	1.00	0.00	N
	ATOM	2108	CA	CYS	A	283	22.271	58.873	23.086	1.00	0.00	C
	ATOM	2109	C	CYS	A	283	22.577	58.834	24.579	1.00	0.00	C
	ATOM	2110	O	CYS	A	283	23.485	59.515	25.055	1.00	0.00	O
	ATOM	2111	CB	CYS	A	283	21.307	60.025	22.785	1.00	0.00	C
45	ATOM	2112	SG	CYS	A	283	22.167	61.630	22.843	1.00	0.00	S
	ATOM	2113	N	GLN	A	284	21.821	58.025	25.314	1.00	0.00	N
	ATOM	2114	CA	GLN	A	284	22.015	57.904	26.752	1.00	0.00	C
	ATOM	2115	C	GLN	A	284	23.300	57.173	27.093	1.00	0.00	C
	ATOM	2116	O	GLN	A	284	23.679	57.080	28.261	1.00	0.00	O
50	ATOM	2117	CB	GLN	A	284	20.824	57.180	27.381	1.00	0.00	C
	ATOM	2118	CG	GLN	A	284	19.513	57.927	27.217	1.00	0.00	C
	ATOM	2119	CD	GLN	A	284	18.333	57.138	27.732	1.00	0.00	C
	ATOM	2120	OE1	GLN	A	284	18.284	56.765	28.905	1.00	0.00	O
	ATOM	2121	NE2	GLN	A	284	17.372	56.876	26.855	1.00	0.00	N
55	ATOM	2122	N	PHE	A	285	23.978	56.657	26.074	1.00	0.00	N
	ATOM	2123	CA	PHE	A	285	25.215	55.941	26.309	1.00	0.00	C
	ATOM	2124	C	PHE	A	285	26.439	56.640	25.730	1.00	0.00	C
	ATOM	2125	O	PHE	A	285	27.480	56.026	25.500	1.00	0.00	O
	ATOM	2126	CB	PHE	A	285	25.061	54.498	25.820	1.00	0.00	C
60	ATOM	2127	CG	PHE	A	285	24.076	53.709	26.645	1.00	0.00	C
	ATOM	2128	CD1	PHE	A	285	24.474	53.103	27.833	1.00	0.00	C
	ATOM	2129	CD2	PHE	A	285	22.732	53.652	26.285	1.00	0.00	C
	ATOM	2130	CE1	PHE	A	285	23.549	52.454	28.657	1.00	0.00	C
	ATOM	2131	CE2	PHE	A	285	21.795	53.006	27.101	1.00	0.00	C
	ATOM	2132	CZ	PHE	A	285	22.208	52.407	28.291	1.00	0.00	C

5	ATOM	2133	N	ASP	A	286	26.283	57.942	25.498	1.00	0.00	N
	ATOM	2134	CA	ASP	A	286	27.367	58.806	25.041	1.00	0.00	C
	ATOM	2135	C	ASP	A	286	27.545	59.652	26.296	1.00	0.00	C
	ATOM	2136	O	ASP	A	286	26.904	60.688	26.462	1.00	0.00	O
	ATOM	2137	CB	ASP	A	286	26.930	59.693	23.874	1.00	0.00	C
	ATOM	2138	CG	ASP	A	286	28.047	60.605	23.391	1.00	0.00	C
	ATOM	2139	OD1	ASP	A	286	29.087	60.686	24.079	1.00	0.00	O
	ATOM	2140	OD2	ASP	A	286	27.884	61.248	22.331	1.00	0.00	O
10	ATOM	2141	N	PHE	A	287	28.409	59.194	27.191	1.00	0.00	N
	ATOM	2142	CA	PHE	A	287	28.601	59.879	28.454	1.00	0.00	C
	ATOM	2143	C	PHE	A	287	29.236	61.263	28.424	1.00	0.00	C
	ATOM	2144	O	PHE	A	287	29.478	61.855	29.469	1.00	0.00	O
	ATOM	2145	CB	PHE	A	287	29.331	58.946	29.419	1.00	0.00	C
	ATOM	2146	CG	PHE	A	287	28.591	57.654	29.657	1.00	0.00	C
15	ATOM	2147	CD1	PHE	A	287	28.815	56.544	28.847	1.00	0.00	C
	ATOM	2148	CD2	PHE	A	287	27.605	57.575	30.638	1.00	0.00	C
	ATOM	2149	CE1	PHE	A	287	28.066	55.379	29.007	1.00	0.00	C
	ATOM	2150	CE2	PHE	A	287	26.849	56.414	30.805	1.00	0.00	C
20	ATOM	2151	CZ	PHE	A	287	27.080	55.313	29.986	1.00	0.00	C
	ATOM	2152	N	LYS	A	288	29.490	61.791	27.230	1.00	0.00	N
	ATOM	2153	CA	LYS	A	288	30.052	63.133	27.133	1.00	0.00	C
	ATOM	2154	C	LYS	A	288	28.900	64.136	27.025	1.00	0.00	C
	ATOM	2155	O	LYS	A	288	29.122	65.341	26.963	1.00	0.00	O
25	ATOM	2156	CB	LYS	A	288	30.964	63.262	25.901	1.00	0.00	C
	ATOM	2157	CG	LYS	A	288	31.708	64.601	25.832	1.00	0.00	C
	ATOM	2158	CD	LYS	A	288	32.650	64.698	24.634	1.00	0.00	C
	ATOM	2159	CE	LYS	A	288	33.439	66.003	24.683	1.00	0.00	C
	ATOM	2160	NZ	LYS	A	288	34.384	66.172	23.531	1.00	0.00	N
30	ATOM	2161	N	ARG	A	289	27.666	63.638	27.022	1.00	0.00	N
	ATOM	2162	CA	ARG	A	289	26.507	64.517	26.890	1.00	0.00	C
	ATOM	2163	C	ARG	A	289	25.711	64.768	28.172	1.00	0.00	C
	ATOM	2164	O	ARG	A	289	24.487	64.873	28.121	1.00	0.00	O
	ATOM	2165	CB	ARG	A	289	25.548	63.968	25.828	1.00	0.00	C
35	ATOM	2166	CG	ARG	A	289	26.170	63.712	24.461	1.00	0.00	C
	ATOM	2167	CD	ARG	A	289	25.088	63.468	23.427	1.00	0.00	C
	ATOM	2168	NE	ARG	A	289	25.617	63.061	22.127	1.00	0.00	N
	ATOM	2169	CZ	ARG	A	289	25.139	63.493	20.965	1.00	0.00	C
	ATOM	2170	NH1	ARG	A	289	24.128	64.355	20.942	1.00	0.00	N
40	ATOM	2171	NH2	ARG	A	289	25.656	63.052	19.826	1.00	0.00	N
	ATOM	2172	N	MET	A	290	26.382	64.885	29.313	1.00	0.00	N
	ATOM	2173	CA	MET	A	290	25.652	65.113	30.557	1.00	0.00	C
	ATOM	2174	C	MET	A	290	25.566	66.574	31.008	1.00	0.00	C
	ATOM	2175	O	MET	A	290	24.856	66.884	31.970	1.00	0.00	O
45	ATOM	2176	CB	MET	A	290	26.226	64.236	31.676	1.00	0.00	C
	ATOM	2177	CG	MET	A	290	26.001	62.746	31.437	1.00	0.00	C
	ATOM	2178	SD	MET	A	290	26.499	61.651	32.789	1.00	0.00	S
	ATOM	2179	CE	MET	A	290	28.245	61.429	32.430	1.00	0.00	C
	ATOM	2180	N	GLY	A	291	26.275	67.470	30.320	1.00	0.00	N
50	ATOM	2181	CA	GLY	A	291	26.209	68.878	30.684	1.00	0.00	C
	ATOM	2182	C	GLY	A	291	27.497	69.686	30.712	1.00	0.00	C
	ATOM	2183	O	GLY	A	291	27.628	70.676	29.987	1.00	0.00	O
	ATOM	2184	N	SER	A	292	28.444	69.274	31.551	1.00	0.00	N
	ATOM	2185	CA	SER	A	292	29.714	69.981	31.693	1.00	0.00	C
55	ATOM	2186	C	SER	A	292	30.514	70.153	30.400	1.00	0.00	C
	ATOM	2187	O	SER	A	292	31.384	71.023	30.324	1.00	0.00	O
	ATOM	2188	CB	SER	A	292	30.588	69.284	32.736	1.00	0.00	C
	ATOM	2189	OG	SER	A	292	30.964	67.989	32.302	1.00	0.00	O
	ATOM	2190	N	PHE	A	293	30.231	69.329	29.393	1.00	0.00	N
60	ATOM	2191	CA	PHE	A	293	30.944	69.418	28.119	1.00	0.00	C
	ATOM	2192	C	PHE	A	293	30.206	70.273	27.093	1.00	0.00	C
	ATOM	2193	O	PHE	A	293	30.664	70.428	25.957	1.00	0.00	O

5	ATOM	2194	CB	PHE	A	293	31.178	68.023	27.525	1.00	0.00	C
	ATOM	2195	CG	PHE	A	293	32.115	67.171	28.329	1.00	0.00	C
	ATOM	2196	CD1	PHE	A	293	31.628	66.289	29.285	1.00	0.00	C
	ATOM	2197	CD2	PHE	A	293	33.489	67.254	28.132	1.00	0.00	C
	ATOM	2198	CE1	PHE	A	293	32.496	65.498	30.035	1.00	0.00	C
	ATOM	2199	CE2	PHE	A	293	34.369	66.470	28.875	1.00	0.00	C
	ATOM	2200	CZ	PHE	A	293	33.871	65.589	29.829	1.00	0.00	C
10	ATOM	2201	N	GLY	A	294	29.064	70.823	27.492	1.00	0.00	N
	ATOM	2202	CA	GLY	A	294	28.294	71.652	26.582	1.00	0.00	C
	ATOM	2203	C	GLY	A	294	27.536	70.859	25.532	1.00	0.00	C
	ATOM	2204	O	GLY	A	294	27.094	71.414	24.524	1.00	0.00	O
	ATOM	2205	N	LEU	A	295	27.387	69.558	25.762	1.00	0.00	N
15	ATOM	2206	CA	LEU	A	295	26.670	68.692	24.833	1.00	0.00	C
	ATOM	2207	C	LEU	A	295	25.448	68.107	25.530	1.00	0.00	C
	ATOM	2208	O	LEU	A	295	25.416	67.999	26.753	1.00	0.00	O
	ATOM	2209	CB	LEU	A	295	27.577	67.554	24.351	1.00	0.00	C
	ATOM	2210	CG	LEU	A	295	28.842	67.930	23.573	1.00	0.00	C
20	ATOM	2211	CD1	LEU	A	295	29.680	66.683	23.325	1.00	0.00	C
	ATOM	2212	CD2	LEU	A	295	28.458	68.592	22.251	1.00	0.00	C
	ATOM	2213	N	SER	A	296	24.444	67.733	24.746	1.00	0.00	N
	ATOM	2214	CA	SER	A	296	23.226	67.152	25.297	1.00	0.00	C
	ATOM	2215	C	SER	A	296	22.563	66.263	24.257	1.00	0.00	C
25	ATOM	2216	O	SER	A	296	23.024	66.175	23.116	1.00	0.00	O
	ATOM	2217	CB	SER	A	296	22.255	68.256	25.729	1.00	0.00	C
	ATOM	2218	OG	SER	A	296	21.872	69.065	24.630	1.00	0.00	O
	ATOM	2219	N	CYS	A	297	21.483	65.602	24.661	1.00	0.00	N
	ATOM	2220	CA	CYS	A	297	20.739	64.719	23.775	1.00	0.00	C
30	ATOM	2221	C	CYS	A	297	19.468	65.391	23.266	1.00	0.00	C
	ATOM	2222	O	CYS	A	297	18.582	65.737	24.045	1.00	0.00	O
	ATOM	2223	CB	CYS	A	297	20.391	63.420	24.506	1.00	0.00	C
	ATOM	2224	SG	CYS	A	297	21.829	62.331	24.719	1.00	0.00	S
	ATOM	2225	N	PRO	A	298	19.364	65.582	21.943	1.00	0.00	N
35	ATOM	2226	CA	PRO	A	298	18.188	66.220	21.347	1.00	0.00	C
	ATOM	2227	C	PRO	A	298	16.889	65.440	21.539	1.00	0.00	C
	ATOM	2228	O	PRO	A	298	15.801	66.000	21.407	1.00	0.00	O
	ATOM	2229	CB	PRO	A	298	18.578	66.356	19.876	1.00	0.00	C
	ATOM	2230	CG	PRO	A	298	19.481	65.186	19.659	1.00	0.00	C
40	ATOM	2231	CD	PRO	A	298	20.337	65.201	20.903	1.00	0.00	C
	ATOM	2232	N	TRP	A	299	17.005	64.152	21.853	1.00	0.00	N
	ATOM	2233	CA	TRP	A	299	15.828	63.313	22.065	1.00	0.00	C
	ATOM	2234	C	TRP	A	299	15.265	63.491	23.480	1.00	0.00	C
	ATOM	2235	O	TRP	A	299	14.368	62.761	23.903	1.00	0.00	O
45	ATOM	2236	CB	TRP	A	299	16.174	61.842	21.775	1.00	0.00	C
	ATOM	2237	CG	TRP	A	299	16.534	61.619	20.324	1.00	0.00	C
	ATOM	2238	CD1	TRP	A	299	15.666	61.438	19.282	1.00	0.00	C
	ATOM	2239	CD2	TRP	A	299	17.850	61.656	19.745	1.00	0.00	C
	ATOM	2240	NE1	TRP	A	299	16.357	61.367	18.093	1.00	0.00	N
50	ATOM	2241	CE2	TRP	A	299	17.697	61.499	18.348	1.00	0.00	C
	ATOM	2242	CE3	TRP	A	299	19.140	61.812	20.270	1.00	0.00	C
	ATOM	2243	CZ2	TRP	A	299	18.789	61.494	17.469	1.00	0.00	C
	ATOM	2244	CZ3	TRP	A	299	20.226	61.806	19.396	1.00	0.00	C
	ATOM	2245	CH2	TRP	A	299	20.041	61.649	18.009	1.00	0.00	C
55	ATOM	2246	N	LYS	A	300	15.815	64.468	24.202	1.00	0.00	N
	ATOM	2247	CA	LYS	A	300	15.368	64.831	25.553	1.00	0.00	C
	ATOM	2248	C	LYS	A	300	15.689	63.912	26.730	1.00	0.00	C
	ATOM	2249	O	LYS	A	300	15.274	64.190	27.853	1.00	0.00	O
	ATOM	2250	CB	LYS	A	300	13.861	65.089	25.539	1.00	0.00	C
60	ATOM	2251	CG	LYS	A	300	13.424	66.125	24.526	1.00	0.00	C
	ATOM	2252	CD	LYS	A	300	11.918	66.321	24.569	1.00	0.00	C
	ATOM	2253	CE	LYS	A	300	11.460	67.272	23.479	1.00	0.00	C
	ATOM	2254	NZ	LYS	A	300	12.177	68.571	23.564	1.00	0.00	N

5	ATOM	2255	N	VAL	A	301	16.403	62.820	26.490	1.00	0.00	N
	ATOM	2256	CA	VAL	A	301	16.765	61.917	27.575	1.00	0.00	C
	ATOM	2257	C	VAL	A	301	18.287	61.901	27.673	1.00	0.00	C
	ATOM	2258	O	VAL	A	301	18.971	61.383	26.790	1.00	0.00	O
	ATOM	2259	CB	VAL	A	301	16.247	60.485	27.325	1.00	0.00	C
10	ATOM	2260	CG1	VAL	A	301	16.525	59.618	28.538	1.00	0.00	C
	ATOM	2261	CG2	VAL	A	301	14.754	60.515	27.028	1.00	0.00	C
	ATOM	2262	N	PRO	A	302	18.836	62.477	28.752	1.00	0.00	N
	ATOM	2263	CA	PRO	A	302	20.281	62.546	28.976	1.00	0.00	C
	ATOM	2264	C	PRO	A	302	20.907	61.253	29.467	1.00	0.00	C
15	ATOM	2265	O	PRO	A	302	20.228	60.389	30.019	1.00	0.00	O
	ATOM	2266	CB	PRO	A	302	20.403	63.653	30.010	1.00	0.00	C
	ATOM	2267	CG	PRO	A	302	19.204	63.392	30.872	1.00	0.00	C
	ATOM	2268	CD	PRO	A	302	18.109	63.148	29.848	1.00	0.00	C
	ATOM	2269	N	PRO	A	303	22.221	61.095	29.255	1.00	0.00	N
20	ATOM	2270	CA	PRO	A	303	22.857	59.866	29.729	1.00	0.00	C
	ATOM	2271	C	PRO	A	303	22.971	59.963	31.247	1.00	0.00	C
	ATOM	2272	O	PRO	A	303	23.018	61.064	31.803	1.00	0.00	O
	ATOM	2273	CB	PRO	A	303	24.216	59.887	29.032	1.00	0.00	C
	ATOM	2274	CG	PRO	A	303	24.506	61.350	28.897	1.00	0.00	C
25	ATOM	2275	CD	PRO	A	303	23.167	61.932	28.494	1.00	0.00	C
	ATOM	2276	N	ARG	A	304	22.993	58.819	31.918	1.00	0.00	N
	ATOM	2277	CA	ARG	A	304	23.111	58.800	33.369	1.00	0.00	C
	ATOM	2278	C	ARG	A	304	24.302	57.959	33.783	1.00	0.00	C
	ATOM	2279	O	ARG	A	304	24.507	56.862	33.266	1.00	0.00	O
30	ATOM	2280	CB	ARG	A	304	21.829	58.248	34.004	1.00	0.00	C
	ATOM	2281	CG	ARG	A	304	20.698	59.268	34.084	1.00	0.00	C
	ATOM	2282	CD	ARG	A	304	19.388	58.628	34.528	1.00	0.00	C
	ATOM	2283	NE	ARG	A	304	18.807	57.784	33.486	1.00	0.00	N
	ATOM	2284	CZ	ARG	A	304	18.401	58.230	32.299	1.00	0.00	C
35	ATOM	2285	NH1	ARG	A	304	18.508	59.518	31.993	1.00	0.00	N
	ATOM	2286	NH2	ARG	A	304	17.884	57.389	31.413	1.00	0.00	N
	ATOM	2287	N	THR	A	305	25.093	58.485	34.712	1.00	0.00	N
	ATOM	2288	CA	THR	A	305	26.268	57.780	35.198	1.00	0.00	C
	ATOM	2289	C	THR	A	305	25.862	56.384	35.646	1.00	0.00	C
40	ATOM	2290	O	THR	A	305	24.863	56.219	36.348	1.00	0.00	O
	ATOM	2291	CB	THR	A	305	26.906	58.530	36.380	1.00	0.00	C
	ATOM	2292	OG1	THR	A	305	27.329	59.828	35.942	1.00	0.00	O
	ATOM	2293	CG2	THR	A	305	28.099	57.766	36.924	1.00	0.00	C
	ATOM	2294	N	ILE	A	306	26.628	55.380	35.231	1.00	0.00	N
45	ATOM	2295	CA	ILE	A	306	26.331	54.001	35.599	1.00	0.00	C
	ATOM	2296	C	ILE	A	306	26.739	53.742	37.046	1.00	0.00	C
	ATOM	2297	O	ILE	A	306	27.808	54.168	37.487	1.00	0.00	O
	ATOM	2298	CB	ILE	A	306	27.079	52.997	34.694	1.00	0.00	C
	ATOM	2299	CG1	ILE	A	306	26.813	53.315	33.219	1.00	0.00	C
50	ATOM	2300	CG2	ILE	A	306	26.639	51.569	35.023	1.00	0.00	C
	ATOM	2301	CD1	ILE	A	306	25.349	53.255	32.815	1.00	0.00	C
	ATOM	2302	N	SER	A	307	25.876	53.045	37.780	1.00	0.00	N
	ATOM	2303	CA	SER	A	307	26.134	52.713	39.178	1.00	0.00	C
	ATOM	2304	C	SER	A	307	25.659	51.290	39.441	1.00	0.00	C
55	ATOM	2305	O	SER	A	307	24.931	50.720	38.634	1.00	0.00	O
	ATOM	2306	CB	SER	A	307	25.379	53.673	40.097	1.00	0.00	C
	ATOM	2307	OG	SER	A	307	23.980	53.548	39.909	1.00	0.00	O
	ATOM	2308	N	ASP	A	308	26.073	50.718	40.568	1.00	0.00	N
	ATOM	2309	CA	ASP	A	308	25.661	49.361	40.923	1.00	0.00	C
60	ATOM	2310	C	ASP	A	308	24.145	49.323	41.039	1.00	0.00	C
	ATOM	2311	O	ASP	A	308	23.515	48.283	40.851	1.00	0.00	O
	ATOM	2312	CB	ASP	A	308	26.287	48.953	42.259	1.00	0.00	C
	ATOM	2313	CG	ASP	A	308	27.775	48.703	42.152	1.00	0.00	C
	ATOM	2314	OD1	ASP	A	308	28.380	49.134	41.150	1.00	0.00	O
	ATOM	2315	OD2	ASP	A	308	28.345	48.083	43.076	1.00	0.00	O

5	ATOM	2316	N	GLN	A	309	23.574	50.483	41.336	1.00	0.00	N
	ATOM	2317	CA	GLN	A	309	22.140	50.646	41.508	1.00	0.00	C
	ATOM	2318	C	GLN	A	309	21.326	50.648	40.213	1.00	0.00	C
	ATOM	2319	O	GLN	A	309	20.203	50.144	40.191	1.00	0.00	O
	ATOM	2320	CB	GLN	A	309	21.891	51.932	42.309	1.00	0.00	C
10	ATOM	2321	CG	GLN	A	309	20.521	52.557	42.168	1.00	0.00	C
	ATOM	2322	CD	GLN	A	309	20.372	53.806	43.027	1.00	0.00	C
	ATOM	2323	OE1	GLN	A	309	19.547	54.680	42.743	1.00	0.00	O
	ATOM	2324	NE2	GLN	A	309	21.166	53.890	44.089	1.00	0.00	N
	ATOM	2325	N	ASN	A	310	21.879	51.195	39.133	1.00	0.00	N
15	ATOM	2326	CA	ASN	A	310	21.144	51.239	37.871	1.00	0.00	C
	ATOM	2327	C	ASN	A	310	21.748	50.415	36.736	1.00	0.00	C
	ATOM	2328	O	ASN	A	310	21.164	50.335	35.660	1.00	0.00	O
	ATOM	2329	CB	ASN	A	310	20.994	52.687	37.387	1.00	0.00	C
	ATOM	2330	CG	ASN	A	310	22.328	53.335	37.044	1.00	0.00	C
20	ATOM	2331	OD1	ASN	A	310	23.268	52.663	36.620	1.00	0.00	O
	ATOM	2332	ND2	ASN	A	310	22.408	54.650	37.211	1.00	0.00	N
	ATOM	2333	N	VAL	A	311	22.906	49.806	36.972	1.00	0.00	N
	ATOM	2334	CA	VAL	A	311	23.582	49.028	35.931	1.00	0.00	C
	ATOM	2335	C	VAL	A	311	22.748	47.908	35.302	1.00	0.00	C
25	ATOM	2336	O	VAL	A	311	22.863	47.649	34.104	1.00	0.00	O
	ATOM	2337	CB	VAL	A	311	24.913	48.433	36.453	1.00	0.00	C
	ATOM	2338	CG1	VAL	A	311	24.639	47.316	37.448	1.00	0.00	C
	ATOM	2339	CG2	VAL	A	311	25.756	47.933	35.278	1.00	0.00	C
	ATOM	2340	N	ALA	A	312	21.910	47.244	36.095	1.00	0.00	N
30	ATOM	2341	CA	ALA	A	312	21.083	46.167	35.557	1.00	0.00	C
	ATOM	2342	C	ALA	A	312	20.067	46.703	34.550	1.00	0.00	C
	ATOM	2343	O	ALA	A	312	19.868	46.114	33.486	1.00	0.00	O
	ATOM	2344	CB	ALA	A	312	20.363	45.429	36.693	1.00	0.00	C
	ATOM	2345	N	ALA	A	313	19.431	47.823	34.887	1.00	0.00	N
35	ATOM	2346	CA	ALA	A	313	18.433	48.439	34.015	1.00	0.00	C
	ATOM	2347	C	ALA	A	313	19.079	49.081	32.790	1.00	0.00	C
	ATOM	2348	O	ALA	A	313	18.541	49.017	31.682	1.00	0.00	O
	ATOM	2349	CB	ALA	A	313	17.641	49.484	34.787	1.00	0.00	C
	ATOM	2350	N	ARG	A	314	20.226	49.716	32.996	1.00	0.00	N
40	ATOM	2351	CA	ARG	A	314	20.941	50.358	31.896	1.00	0.00	C
	ATOM	2352	C	ARG	A	314	21.411	49.291	30.907	1.00	0.00	C
	ATOM	2353	O	ARG	A	314	21.307	49.464	29.691	1.00	0.00	O
	ATOM	2354	CB	ARG	A	314	22.147	51.130	32.435	1.00	0.00	C
	ATOM	2355	CG	ARG	A	314	21.805	52.288	33.365	1.00	0.00	C
45	ATOM	2356	CD	ARG	A	314	21.451	53.557	32.599	1.00	0.00	C
	ATOM	2357	NE	ARG	A	314	20.085	53.557	32.090	1.00	0.00	N
	ATOM	2358	CZ	ARG	A	314	19.594	54.486	31.276	1.00	0.00	C
	ATOM	2359	NH1	ARG	A	314	20.361	55.489	30.871	1.00	0.00	N
	ATOM	2360	NH2	ARG	A	314	18.334	54.422	30.875	1.00	0.00	N
50	ATOM	2361	N	SER	A	315	21.919	48.184	31.439	1.00	0.00	N
	ATOM	2362	CA	SER	A	315	22.404	47.081	30.611	1.00	0.00	C
	ATOM	2363	C	SER	A	315	21.270	46.457	29.815	1.00	0.00	C
	ATOM	2364	O	SER	A	315	21.425	46.141	28.636	1.00	0.00	O
	ATOM	2365	CB	SER	A	315	23.063	46.008	31.483	1.00	0.00	C
55	ATOM	2366	OG	SER	A	315	24.249	46.498	32.083	1.00	0.00	O
	ATOM	2367	N	ASP	A	316	20.121	46.283	30.460	1.00	0.00	N
	ATOM	2368	CA	ASP	A	316	18.974	45.692	29.788	1.00	0.00	C
	ATOM	2369	C	ASP	A	316	18.605	46.540	28.573	1.00	0.00	C
	ATOM	2370	O	ASP	A	316	18.311	46.009	27.501	1.00	0.00	O
60	ATOM	2371	CB	ASP	A	316	17.793	45.593	30.758	1.00	0.00	C
	ATOM	2372	CG	ASP	A	316	16.715	44.647	30.268	1.00	0.00	C
	ATOM	2373	OD1	ASP	A	316	17.040	43.482	29.946	1.00	0.00	O
	ATOM	2374	OD2	ASP	A	316	15.542	45.068	30.211	1.00	0.00	O
	ATOM	2375	N	LEU	A	317	18.633	47.861	28.738	1.00	0.00	N
	ATOM	2376	CA	LEU	A	317	18.318	48.766	27.638	1.00	0.00	C

5	ATOM	2377	C	LEU	A	317	19.362	48.680	26.531	1.00	0.00	C
	ATOM	2378	O	LEU	A	317	19.024	48.567	25.353	1.00	0.00	O
	ATOM	2379	CB	LEU	A	317	18.246	50.214	28.133	1.00	0.00	C
	ATOM	2380	CG	LEU	A	317	16.879	50.764	28.537	1.00	0.00	C
	ATOM	2381	CD1	LEU	A	317	17.049	52.176	29.092	1.00	0.00	C
10	ATOM	2382	CD2	LEU	A	317	15.952	50.777	27.330	1.00	0.00	C
	ATOM	2383	N	LEU	A	318	20.632	48.738	26.918	1.00	0.00	N
	ATOM	2384	CA	LEU	A	318	21.725	48.693	25.952	1.00	0.00	C
	ATOM	2385	C	LEU	A	318	21.791	47.364	25.212	1.00	0.00	C
	ATOM	2386	O	LEU	A	318	21.826	47.329	23.981	1.00	0.00	O
15	ATOM	2387	CB	LEU	A	318	23.061	48.957	26.653	1.00	0.00	C
	ATOM	2388	CG	LEU	A	318	24.279	49.102	25.734	1.00	0.00	C
	ATOM	2389	CD1	LEU	A	318	24.038	50.236	24.743	1.00	0.00	C
	ATOM	2390	CD2	LEU	A	318	25.528	49.371	26.569	1.00	0.00	C
	ATOM	2391	N	VAL	A	319	21.815	46.268	25.962	1.00	0.00	N
20	ATOM	2392	CA	VAL	A	319	21.879	44.950	25.349	1.00	0.00	C
	ATOM	2393	C	VAL	A	319	20.740	44.769	24.351	1.00	0.00	C
	ATOM	2394	O	VAL	A	319	20.922	44.165	23.297	1.00	0.00	O
	ATOM	2395	CB	VAL	A	319	21.820	43.839	26.417	1.00	0.00	C
	ATOM	2396	CG1	VAL	A	319	21.629	42.483	25.755	1.00	0.00	C
25	ATOM	2397	CG2	VAL	A	319	23.107	43.842	27.230	1.00	0.00	C
	ATOM	2398	N	ASP	A	320	19.567	45.304	24.675	1.00	0.00	N
	ATOM	2399	CA	ASP	A	320	18.420	45.187	23.779	1.00	0.00	C
	ATOM	2400	C	ASP	A	320	18.716	45.878	22.446	1.00	0.00	C
	ATOM	2401	O	ASP	A	320	18.350	45.378	21.382	1.00	0.00	O
30	ATOM	2402	CB	ASP	A	320	17.179	45.794	24.435	1.00	0.00	C
	ATOM	2403	CG	ASP	A	320	15.976	45.789	23.522	1.00	0.00	C
	ATOM	2404	OD1	ASP	A	320	15.527	46.886	23.133	1.00	0.00	O
	ATOM	2405	OD2	ASP	A	320	15.481	44.692	23.191	1.00	0.00	O
	ATOM	2406	N	GLN	A	321	19.376	47.031	22.509	1.00	0.00	N
35	ATOM	2407	CA	GLN	A	321	19.741	47.761	21.298	1.00	0.00	C
	ATOM	2408	C	GLN	A	321	20.740	46.935	20.501	1.00	0.00	C
	ATOM	2409	O	GLN	A	321	20.630	46.816	19.279	1.00	0.00	O
	ATOM	2410	CB	GLN	A	321	20.371	49.109	21.654	1.00	0.00	C
	ATOM	2411	CG	GLN	A	321	19.366	50.146	22.102	1.00	0.00	C
40	ATOM	2412	CD	GLN	A	321	18.323	50.413	21.040	1.00	0.00	C
	ATOM	2413	OE1	GLN	A	321	18.645	50.834	19.926	1.00	0.00	O
	ATOM	2414	NE2	GLN	A	321	17.062	50.164	21.375	1.00	0.00	N
	ATOM	2415	N	TRP	A	322	21.718	46.368	21.203	1.00	0.00	N
	ATOM	2416	CA	TRP	A	322	22.738	45.544	20.568	1.00	0.00	C
45	ATOM	2417	C	TRP	A	322	22.133	44.351	19.837	1.00	0.00	C
	ATOM	2418	O	TRP	A	322	22.476	44.081	18.685	1.00	0.00	O
	ATOM	2419	CB	TRP	A	322	23.744	45.027	21.600	1.00	0.00	C
	ATOM	2420	CG	TRP	A	322	24.688	46.060	22.143	1.00	0.00	C
	ATOM	2421	CD1	TRP	A	322	24.907	47.315	21.656	1.00	0.00	C
50	ATOM	2422	CD2	TRP	A	322	25.583	45.898	23.249	1.00	0.00	C
	ATOM	2423	NE1	TRP	A	322	25.887	47.945	22.390	1.00	0.00	N
	ATOM	2424	CE2	TRP	A	322	26.319	47.097	23.373	1.00	0.00	C
	ATOM	2425	CE3	TRP	A	322	25.837	44.853	24.148	1.00	0.00	C
	ATOM	2426	CZ2	TRP	A	322	27.292	47.281	24.363	1.00	0.00	C
55	ATOM	2427	CZ3	TRP	A	322	26.805	45.034	25.132	1.00	0.00	C
	ATOM	2428	CH2	TRP	A	322	27.520	46.240	25.230	1.00	0.00	C
	ATOM	2429	N	LYS	A	323	21.246	43.627	20.512	1.00	0.00	N
	ATOM	2430	CA	LYS	A	323	20.621	42.461	19.899	1.00	0.00	C
	ATOM	2431	C	LYS	A	323	19.759	42.830	18.699	1.00	0.00	C
60	ATOM	2432	O	LYS	A	323	19.625	42.046	17.763	1.00	0.00	O
	ATOM	2433	CB	LYS	A	323	19.817	41.680	20.943	1.00	0.00	C
	ATOM	2434	CG	LYS	A	323	20.730	40.891	21.882	1.00	0.00	C
	ATOM	2435	CD	LYS	A	323	19.956	40.047	22.883	1.00	0.00	C
	ATOM	2436	CE	LYS	A	323	20.914	39.198	23.710	1.00	0.00	C
	ATOM	2437	NZ	LYS	A	323	20.199	38.349	24.700	1.00	0.00	N

5	ATOM	2438	N	LYS	A	324	19.181	44.024	18.716	1.00	0.00	N
	ATOM	2439	CA	LYS	A	324	18.376	44.457	17.581	1.00	0.00	C
	ATOM	2440	C	LYS	A	324	19.313	44.754	16.415	1.00	0.00	C
	ATOM	2441	O	LYS	A	324	19.041	44.373	15.276	1.00	0.00	O
	ATOM	2442	CB	LYS	A	324	17.551	45.693	17.945	1.00	0.00	C
10	ATOM	2443	CG	LYS	A	324	16.374	45.365	18.855	1.00	0.00	C
	ATOM	2444	CD	LYS	A	324	15.586	46.600	19.267	1.00	0.00	C
	ATOM	2445	CE	LYS	A	324	14.390	46.201	20.135	1.00	0.00	C
	ATOM	2446	NZ	LYS	A	324	13.676	47.386	20.693	1.00	0.00	N
	ATOM	2447	N	LYS	A	325	20.430	45.417	16.700	1.00	0.00	N
15	ATOM	2448	CA	LYS	A	325	21.392	45.728	15.646	1.00	0.00	C
	ATOM	2449	C	LYS	A	325	21.941	44.418	15.076	1.00	0.00	C
	ATOM	2450	O	LYS	A	325	22.101	44.276	13.863	1.00	0.00	O
	ATOM	2451	CB	LYS	A	325	22.545	46.576	16.200	1.00	0.00	C
	ATOM	2452	CG	LYS	A	325	23.439	47.172	15.117	1.00	0.00	C
20	ATOM	2453	CD	LYS	A	325	24.583	47.999	15.701	1.00	0.00	C
	ATOM	2454	CE	LYS	A	325	25.399	48.653	14.588	1.00	0.00	C
	ATOM	2455	NZ	LYS	A	325	26.594	49.372	15.107	1.00	0.00	N
	ATOM	2456	N	ALA	A	326	22.212	43.461	15.961	1.00	0.00	N
	ATOM	2457	CA	ALA	A	326	22.746	42.157	15.566	1.00	0.00	C
25	ATOM	2458	C	ALA	A	326	21.847	41.398	14.587	1.00	0.00	C
	ATOM	2459	O	ALA	A	326	22.321	40.548	13.831	1.00	0.00	O
	ATOM	2460	CB	ALA	A	326	22.993	41.302	16.805	1.00	0.00	C
	ATOM	2461	N	GLU	A	327	20.554	41.697	14.604	1.00	0.00	N
	ATOM	2462	CA	GLU	A	327	19.610	41.031	13.708	1.00	0.00	C
30	ATOM	2463	C	GLU	A	327	19.823	41.409	12.248	1.00	0.00	C
	ATOM	2464	O	GLU	A	327	19.373	40.705	11.345	1.00	0.00	O
	ATOM	2465	CB	GLU	A	327	18.173	41.375	14.099	1.00	0.00	C
	ATOM	2466	CG	GLU	A	327	17.644	40.575	15.262	1.00	0.00	C
	ATOM	2467	CD	GLU	A	327	17.587	39.091	14.952	1.00	0.00	C
35	ATOM	2468	OE1	GLU	A	327	16.900	38.710	13.981	1.00	0.00	O
	ATOM	2469	OE2	GLU	A	327	18.231	38.310	15.676	1.00	0.00	O
	ATOM	2470	N	LEU	A	328	20.510	42.523	12.020	1.00	0.00	N
	ATOM	2471	CA	LEU	A	328	20.750	42.989	10.663	1.00	0.00	C
	ATOM	2472	C	LEU	A	328	21.969	42.334	10.022	1.00	0.00	C
40	ATOM	2473	O	LEU	A	328	22.225	42.539	8.836	1.00	0.00	O
	ATOM	2474	CB	LEU	A	328	20.910	44.515	10.654	1.00	0.00	C
	ATOM	2475	CG	LEU	A	328	19.804	45.321	11.345	1.00	0.00	C
	ATOM	2476	CD1	LEU	A	328	20.034	46.810	11.114	1.00	0.00	C
	ATOM	2477	CD2	LEU	A	328	18.436	44.902	10.813	1.00	0.00	C
45	ATOM	2478	N	TYR	A	329	22.713	41.549	10.800	1.00	0.00	N
	ATOM	2479	CA	TYR	A	329	23.906	40.872	10.291	1.00	0.00	C
	ATOM	2480	C	TYR	A	329	23.843	39.349	10.449	1.00	0.00	C
	ATOM	2481	O	TYR	A	329	22.952	38.823	11.121	1.00	0.00	O
	ATOM	2482	CB	TYR	A	329	25.163	41.451	10.956	1.00	0.00	C
50	ATOM	2483	CG	TYR	A	329	25.356	42.922	10.639	1.00	0.00	C
	ATOM	2484	CD1	TYR	A	329	24.736	43.912	11.407	1.00	0.00	C
	ATOM	2485	CD2	TYR	A	329	26.106	43.323	9.530	1.00	0.00	C
	ATOM	2486	CE1	TYR	A	329	24.857	45.263	11.077	1.00	0.00	C
	ATOM	2487	CE2	TYR	A	329	26.231	44.670	9.192	1.00	0.00	C
55	ATOM	2488	CZ	TYR	A	329	25.604	45.634	9.969	1.00	0.00	C
	ATOM	2489	OH	TYR	A	329	25.717	46.965	9.634	1.00	0.00	O
	ATOM	2490	N	ARG	A	330	24.795	38.648	9.837	1.00	0.00	N
	ATOM	2491	CA	ARG	A	330	24.799	37.188	9.845	1.00	0.00	C
	ATOM	2492	C	ARG	A	330	25.619	36.414	10.878	1.00	0.00	C
60	ATOM	2493	O	ARG	A	330	25.375	35.225	11.076	1.00	0.00	O
	ATOM	2494	CB	ARG	A	330	25.169	36.689	8.442	1.00	0.00	C
	ATOM	2495	CG	ARG	A	330	24.273	37.270	7.356	1.00	0.00	C
	ATOM	2496	CD	ARG	A	330	24.492	36.623	5.994	1.00	0.00	C
	ATOM	2497	NE	ARG	A	330	23.565	37.189	5.020	1.00	0.00	N
	ATOM	2498	CZ	ARG	A	330	23.295	36.657	3.831	1.00	0.00	C

5	ATOM	2499	NH1	ARG	A	330	23.885	35.530	3.450	1.00	0.00	N
	ATOM	2500	NH2	ARG	A	330	22.425	37.251	3.024	1.00	0.00	N
	ATOM	2501	N	THR	A	331	26.590	37.049	11.528	1.00	0.00	N
	ATOM	2502	CA	THR	A	331	27.386	36.324	12.520	1.00	0.00	C
	ATOM	2503	C	THR	A	331	27.006	36.729	13.937	1.00	0.00	C
	ATOM	2504	O	THR	A	331	26.151	37.596	14.140	1.00	0.00	O
10	ATOM	2505	CB	THR	A	331	28.902	36.579	12.352	1.00	0.00	C
	ATOM	2506	OG1	THR	A	331	29.218	37.896	12.815	1.00	0.00	O
	ATOM	2507	CG2	THR	A	331	29.318	36.440	10.887	1.00	0.00	C
	ATOM	2508	N	ASN	A	332	27.651	36.099	14.914	1.00	0.00	N
	ATOM	2509	CA	ASN	A	332	27.398	36.403	16.316	1.00	0.00	C
	ATOM	2510	C	ASN	A	332	28.462	37.373	16.835	1.00	0.00	C
15	ATOM	2511	O	ASN	A	332	28.720	37.454	18.038	1.00	0.00	O
	ATOM	2512	CB	ASN	A	332	27.379	35.109	17.150	1.00	0.00	C
	ATOM	2513	CG	ASN	A	332	28.746	34.448	17.254	1.00	0.00	C
	ATOM	2514	OD1	ASN	A	332	29.527	34.446	16.302	1.00	0.00	O
	ATOM	2515	ND2	ASN	A	332	29.033	33.866	18.417	1.00	0.00	N
	ATOM	2516	N	VAL	A	333	29.079	38.106	15.909	1.00	0.00	N
20	ATOM	2517	CA	VAL	A	333	30.098	39.094	16.248	1.00	0.00	C
	ATOM	2518	C	VAL	A	333	29.524	40.454	15.850	1.00	0.00	C
	ATOM	2519	O	VAL	A	333	29.201	40.674	14.684	1.00	0.00	O
	ATOM	2520	CB	VAL	A	333	31.413	38.843	15.472	1.00	0.00	C
	ATOM	2521	CG1	VAL	A	333	32.457	39.884	15.864	1.00	0.00	C
	ATOM	2522	CG2	VAL	A	333	31.925	37.442	15.761	1.00	0.00	C
25	ATOM	2523	N	LEU	A	334	29.406	41.361	16.817	1.00	0.00	N
	ATOM	2524	CA	LEU	A	334	28.816	42.671	16.564	1.00	0.00	C
	ATOM	2525	C	LEU	A	334	29.759	43.866	16.719	1.00	0.00	C
	ATOM	2526	O	LEU	A	334	30.469	43.988	17.715	1.00	0.00	O
	ATOM	2527	CB	LEU	A	334	27.609	42.859	17.488	1.00	0.00	C
	ATOM	2528	CG	LEU	A	334	26.795	44.143	17.332	1.00	0.00	C
30	ATOM	2529	CD1	LEU	A	334	26.072	44.128	15.988	1.00	0.00	C
	ATOM	2530	CD2	LEU	A	334	25.797	44.254	18.475	1.00	0.00	C
	ATOM	2531	N	LEU	A	335	29.741	44.756	15.730	1.00	0.00	N
	ATOM	2532	CA	LEU	A	335	30.584	45.952	15.755	1.00	0.00	C
	ATOM	2533	C	LEU	A	335	29.798	47.139	16.297	1.00	0.00	C
	ATOM	2534	O	LEU	A	335	28.721	47.455	15.796	1.00	0.00	O
35	ATOM	2535	CB	LEU	A	335	31.081	46.287	14.346	1.00	0.00	C
	ATOM	2536	CG	LEU	A	335	31.843	47.612	14.214	1.00	0.00	C
	ATOM	2537	CD1	LEU	A	335	33.147	47.540	14.993	1.00	0.00	C
	ATOM	2538	CD2	LEU	A	335	32.113	47.903	12.747	1.00	0.00	C
	ATOM	2539	N	ILE	A	336	30.343	47.797	17.318	1.00	0.00	N
	ATOM	2540	CA	ILE	A	336	29.697	48.959	17.922	1.00	0.00	C
40	ATOM	2541	C	ILE	A	336	30.683	50.123	18.003	1.00	0.00	C
	ATOM	2542	O	ILE	A	336	31.436	50.244	18.965	1.00	0.00	O
	ATOM	2543	CB	ILE	A	336	29.183	48.652	19.360	1.00	0.00	C
	ATOM	2544	CG1	ILE	A	336	28.160	47.507	19.331	1.00	0.00	C
	ATOM	2545	CG2	ILE	A	336	28.537	49.895	19.965	1.00	0.00	C
	ATOM	2546	CD1	ILE	A	336	26.851	47.848	18.628	1.00	0.00	C
45	ATOM	2547	N	PRO	A	337	30.711	50.981	16.974	1.00	0.00	N
	ATOM	2548	CA	PRO	A	337	31.636	52.119	17.017	1.00	0.00	C
	ATOM	2549	C	PRO	A	337	31.256	53.035	18.179	1.00	0.00	C
	ATOM	2550	O	PRO	A	337	30.080	53.150	18.515	1.00	0.00	O
	ATOM	2551	CB	PRO	A	337	31.404	52.807	15.672	1.00	0.00	C
	ATOM	2552	CG	PRO	A	337	30.981	51.684	14.778	1.00	0.00	C
50	ATOM	2553	CD	PRO	A	337	30.044	50.892	15.665	1.00	0.00	C
	ATOM	2554	N	LEU	A	338	32.249	53.678	18.789	1.00	0.00	N
	ATOM	2555	CA	LEU	A	338	31.994	54.601	19.893	1.00	0.00	C
	ATOM	2556	C	LEU	A	338	32.802	55.875	19.671	1.00	0.00	C
	ATOM	2557	O	LEU	A	338	33.941	55.972	20.112	1.00	0.00	O
	ATOM	2558	CB	LEU	A	338	32.396	53.981	21.238	1.00	0.00	C
60	ATOM	2559	CG	LEU	A	338	32.108	54.865	22.461	1.00	0.00	C

5	ATOM	2560	CD1	LEU	A	338	30.606	54.919	22.707	1.00	0.00	C
	ATOM	2561	CD2	LEU	A	338	32.827	54.315	23.693	1.00	0.00	C
	ATOM	2562	N	GLY	A	339	32.211	56.849	18.983	1.00	0.00	N
	ATOM	2563	CA	GLY	A	339	32.924	58.091	18.731	1.00	0.00	C
	ATOM	2564	C	GLY	A	339	32.131	59.114	17.943	1.00	0.00	C
	ATOM	2565	O	GLY	A	339	30.970	58.889	17.596	1.00	0.00	O
	ATOM	2566	N	ASP	A	340	32.769	60.244	17.658	1.00	0.00	N
10	ATOM	2567	CA	ASP	A	340	32.141	61.329	16.919	1.00	0.00	C
	ATOM	2568	C	ASP	A	340	33.265	62.270	16.472	1.00	0.00	C
	ATOM	2569	O	ASP	A	340	34.445	61.949	16.626	1.00	0.00	O
	ATOM	2570	CB	ASP	A	340	31.165	62.076	17.831	1.00	0.00	C
15	ATOM	2571	CG	ASP	A	340	30.043	62.759	17.068	1.00	0.00	C
	ATOM	2572	OD1	ASP	A	340	30.242	63.118	15.886	1.00	0.00	O
	ATOM	2573	OD2	ASP	A	340	28.961	62.952	17.664	1.00	0.00	O
	ATOM	2574	N	ASP	A	341	32.902	63.432	15.938	1.00	0.00	N
	ATOM	2575	CA	ASP	A	341	33.896	64.396	15.468	1.00	0.00	C
20	ATOM	2576	C	ASP	A	341	34.810	64.907	16.574	1.00	0.00	C
	ATOM	2577	O	ASP	A	341	34.343	65.379	17.612	1.00	0.00	O
	ATOM	2578	CB	ASP	A	341	33.211	65.593	14.803	1.00	0.00	C
	ATOM	2579	CG	ASP	A	341	32.537	65.230	13.494	1.00	0.00	C
	ATOM	2580	OD1	ASP	A	341	32.491	64.027	13.165	1.00	0.00	O
25	ATOM	2581	OD2	ASP	A	341	32.053	66.150	12.799	1.00	0.00	O
	ATOM	2582	N	PHE	A	342	36.113	64.813	16.330	1.00	0.00	N
	ATOM	2583	CA	PHE	A	342	37.128	65.274	17.264	1.00	0.00	C
	ATOM	2584	C	PHE	A	342	36.835	64.915	18.717	1.00	0.00	C
	ATOM	2585	O	PHE	A	342	36.977	65.748	19.619	1.00	0.00	O
	ATOM	2586	CB	PHE	A	342	37.314	66.788	17.125	1.00	0.00	C
30	ATOM	2587	CG	PHE	A	342	37.850	67.213	15.781	1.00	0.00	C
	ATOM	2588	CD1	PHE	A	342	36.986	67.554	14.743	1.00	0.00	C
	ATOM	2589	CD2	PHE	A	342	39.223	67.254	15.549	1.00	0.00	C
	ATOM	2590	CE1	PHE	A	342	37.478	67.932	13.492	1.00	0.00	C
	ATOM	2591	CE2	PHE	A	342	39.728	67.628	14.303	1.00	0.00	C
	ATOM	2592	CZ	PHE	A	342	38.853	67.969	13.272	1.00	0.00	C
35	ATOM	2593	N	ARG	A	343	36.432	63.667	18.936	1.00	0.00	N
	ATOM	2594	CA	ARG	A	343	36.138	63.187	20.278	1.00	0.00	C
	ATOM	2595	C	ARG	A	343	37.402	62.725	20.993	1.00	0.00	C
	ATOM	2596	O	ARG	A	343	38.473	62.616	20.389	1.00	0.00	O
	ATOM	2597	CB	ARG	A	343	35.131	62.033	20.226	1.00	0.00	C
40	ATOM	2598	CG	ARG	A	343	33.686	62.471	20.031	1.00	0.00	C
	ATOM	2599	CD	ARG	A	343	33.263	63.432	21.143	1.00	0.00	C
	ATOM	2600	NE	ARG	A	343	31.836	63.740	21.103	1.00	0.00	N
	ATOM	2601	CZ	ARG	A	343	30.892	63.005	21.682	1.00	0.00	C
	ATOM	2602	NH1	ARG	A	343	31.213	61.907	22.356	1.00	0.00	N
45	ATOM	2603	NH2	ARG	A	343	29.621	63.374	21.591	1.00	0.00	N
	ATOM	2604	N	PHE	A	344	37.256	62.451	22.285	1.00	0.00	N
	ATOM	2605	CA	PHE	A	344	38.351	61.999	23.136	1.00	0.00	C
	ATOM	2606	C	PHE	A	344	39.486	63.003	23.223	1.00	0.00	C
	ATOM	2607	O	PHE	A	344	40.661	62.653	23.089	1.00	0.00	O
50	ATOM	2608	CB	PHE	A	344	38.864	60.640	22.660	1.00	0.00	C
	ATOM	2609	CG	PHE	A	344	37.858	59.544	22.816	1.00	0.00	C
	ATOM	2610	CD1	PHE	A	344	37.086	59.128	21.737	1.00	0.00	C
	ATOM	2611	CD2	PHE	A	344	37.633	58.968	24.064	1.00	0.00	C
	ATOM	2612	CE1	PHE	A	344	36.103	58.158	21.896	1.00	0.00	C
55	ATOM	2613	CE2	PHE	A	344	36.650	57.996	24.234	1.00	0.00	C
	ATOM	2614	CZ	PHE	A	344	35.883	57.591	23.147	1.00	0.00	C
	ATOM	2615	N	LYS	A	345	39.111	64.253	23.475	1.00	0.00	N
	ATOM	2616	CA	LYS	A	345	40.055	65.352	23.591	1.00	0.00	C
	ATOM	2617	C	LYS	A	345	40.501	65.568	25.038	1.00	0.00	C
60	ATOM	2618	O	LYS	A	345	41.691	65.581	25.328	1.00	0.00	O
	ATOM	2619	CB	LYS	A	345	39.411	66.631	23.056	1.00	0.00	C
	ATOM	2620	CG	LYS	A	345	40.278	67.865	23.145	1.00	0.00	C

5	ATOM	2621	CD	LYS	A	345	39.504	69.083	22.658	1.00	0.00	C
	ATOM	2622	CE	LYS	A	345	40.313	70.355	22.801	1.00	0.00	C
	ATOM	2623	NZ	LYS	A	345	39.506	71.537	22.388	1.00	0.00	N
	ATOM	2624	N	GLN	A	346	39.540	65.728	25.941	1.00	0.00	N
	ATOM	2625	CA	GLN	A	346	39.839	65.965	27.350	1.00	0.00	C
	ATOM	2626	C	GLN	A	346	40.008	64.681	28.158	1.00	0.00	C
	ATOM	2627	O	GLN	A	346	39.352	63.676	27.889	1.00	0.00	O
	ATOM	2628	CB	GLN	A	346	38.722	66.800	27.973	1.00	0.00	C
10	ATOM	2629	CG	GLN	A	346	38.457	68.107	27.258	1.00	0.00	C
	ATOM	2630	CD	GLN	A	346	37.101	68.683	27.604	1.00	0.00	C
	ATOM	2631	OE1	GLN	A	346	36.814	68.969	28.768	1.00	0.00	O
	ATOM	2632	NE2	GLN	A	346	36.252	68.850	26.593	1.00	0.00	N
15	ATOM	2633	N	ASN	A	347	40.887	64.724	29.156	1.00	0.00	N
	ATOM	2634	CA	ASN	A	347	41.120	63.566	30.012	1.00	0.00	C
	ATOM	2635	C	ASN	A	347	39.804	63.156	30.655	1.00	0.00	C
	ATOM	2636	O	ASN	A	347	39.493	61.968	30.765	1.00	0.00	O
	ATOM	2637	CB	ASN	A	347	42.127	63.900	31.117	1.00	0.00	C
	ATOM	2638	CG	ASN	A	347	43.499	64.205	30.577	1.00	0.00	C
20	ATOM	2639	OD1	ASN	A	347	44.098	63.384	29.882	1.00	0.00	O
	ATOM	2640	ND2	ASN	A	347	44.014	65.391	30.893	1.00	0.00	N
	ATOM	2641	N	THR	A	348	39.036	64.153	31.079	1.00	0.00	N
	ATOM	2642	CA	THR	A	348	37.751	63.910	31.716	1.00	0.00	C
25	ATOM	2643	C	THR	A	348	36.837	63.127	30.785	1.00	0.00	C
	ATOM	2644	O	THR	A	348	36.042	62.300	31.237	1.00	0.00	O
	ATOM	2645	CB	THR	A	348	37.070	65.234	32.110	1.00	0.00	C
	ATOM	2646	OG1	THR	A	348	36.994	66.095	30.965	1.00	0.00	O
	ATOM	2647	CG2	THR	A	348	37.860	65.925	33.215	1.00	0.00	C
	ATOM	2648	N	GLU	A	349	36.957	63.383	29.484	1.00	0.00	N
30	ATOM	2649	CA	GLU	A	349	36.141	62.675	28.504	1.00	0.00	C
	ATOM	2650	C	GLU	A	349	36.553	61.209	28.426	1.00	0.00	C
	ATOM	2651	O	GLU	A	349	35.701	60.324	28.382	1.00	0.00	O
	ATOM	2652	CB	GLU	A	349	36.266	63.308	27.113	1.00	0.00	C
35	ATOM	2653	CG	GLU	A	349	35.466	62.548	26.054	1.00	0.00	C
	ATOM	2654	CD	GLU	A	349	35.592	63.132	24.659	1.00	0.00	C
	ATOM	2655	OE1	GLU	A	349	35.039	62.523	23.718	1.00	0.00	O
	ATOM	2656	OE2	GLU	A	349	36.237	64.188	24.499	1.00	0.00	O
	ATOM	2657	N	TRP	A	350	37.859	60.950	28.396	1.00	0.00	N
	ATOM	2658	CA	TRP	A	350	38.334	59.575	28.339	1.00	0.00	C
40	ATOM	2659	C	TRP	A	350	37.800	58.804	29.539	1.00	0.00	C
	ATOM	2660	O	TRP	A	350	37.307	57.683	29.405	1.00	0.00	O
	ATOM	2661	CB	TRP	A	350	39.865	59.515	28.342	1.00	0.00	C
	ATOM	2662	CG	TRP	A	350	40.489	59.775	27.004	1.00	0.00	C
45	ATOM	2663	CD1	TRP	A	350	40.855	60.987	26.485	1.00	0.00	C
	ATOM	2664	CD2	TRP	A	350	40.786	58.802	25.998	1.00	0.00	C
	ATOM	2665	NE1	TRP	A	350	41.361	60.825	25.217	1.00	0.00	N
	ATOM	2666	CE2	TRP	A	350	41.329	59.495	24.892	1.00	0.00	C
	ATOM	2667	CE3	TRP	A	350	40.643	57.409	25.920	1.00	0.00	C
	ATOM	2668	CZ2	TRP	A	350	41.729	58.842	23.722	1.00	0.00	C
50	ATOM	2669	CZ3	TRP	A	350	41.042	56.759	24.754	1.00	0.00	C
	ATOM	2670	CH2	TRP	A	350	41.578	57.477	23.672	1.00	0.00	C
	ATOM	2671	N	ASP	A	351	37.897	59.416	30.714	1.00	0.00	N
	ATOM	2672	CA	ASP	A	351	37.427	58.778	31.937	1.00	0.00	C
55	ATOM	2673	C	ASP	A	351	35.936	58.483	31.935	1.00	0.00	C
	ATOM	2674	O	ASP	A	351	35.519	57.362	32.245	1.00	0.00	O
	ATOM	2675	CB	ASP	A	351	37.737	59.641	33.163	1.00	0.00	C
	ATOM	2676	CG	ASP	A	351	39.211	59.698	33.484	1.00	0.00	C
	ATOM	2677	OD1	ASP	A	351	39.917	58.694	33.255	1.00	0.00	O
	ATOM	2678	OD2	ASP	A	351	39.658	60.746	33.987	1.00	0.00	O
60	ATOM	2679	N	VAL	A	352	35.131	59.484	31.593	1.00	0.00	N
	ATOM	2680	CA	VAL	A	352	33.688	59.306	31.613	1.00	0.00	C
	ATOM	2681	C	VAL	A	352	33.197	58.234	30.637	1.00	0.00	C

5	ATOM	2682	O	VAL	A	352	32.238	57.520	30.930	1.00	0.00	O
	ATOM	2683	CB	VAL	A	352	32.951	60.650	31.362	1.00	0.00	C
	ATOM	2684	CG1	VAL	A	352	32.874	60.957	29.875	1.00	0.00	C
10	ATOM	2685	CG2	VAL	A	352	31.570	60.606	31.997	1.00	0.00	C
	ATOM	2686	N	GLN	A	353	33.848	58.106	29.484	1.00	0.00	N
	ATOM	2687	CA	GLN	A	353	33.436	57.084	28.527	1.00	0.00	C
15	ATOM	2688	C	GLN	A	353	33.959	55.709	28.960	1.00	0.00	C
	ATOM	2689	O	GLN	A	353	33.206	54.735	28.981	1.00	0.00	O
	ATOM	2690	CB	GLN	A	353	33.942	57.422	27.114	1.00	0.00	C
20	ATOM	2691	CG	GLN	A	353	33.383	58.725	26.528	1.00	0.00	C
	ATOM	2692	CD	GLN	A	353	31.939	58.612	26.048	1.00	0.00	C
	ATOM	2693	OE1	GLN	A	353	31.114	57.942	26.669	1.00	0.00	O
25	ATOM	2694	NE2	GLN	A	353	31.626	59.289	24.943	1.00	0.00	N
	ATOM	2695	N	ARG	A	354	35.239	55.631	29.320	1.00	0.00	N
	ATOM	2696	CA	ARG	A	354	35.834	54.359	29.734	1.00	0.00	C
30	ATOM	2697	C	ARG	A	354	35.243	53.759	31.008	1.00	0.00	C
	ATOM	2698	O	ARG	A	354	34.879	52.583	31.030	1.00	0.00	O
	ATOM	2699	CB	ARG	A	354	37.351	54.501	29.922	1.00	0.00	C
35	ATOM	2700	CG	ARG	A	354	38.018	53.237	30.465	1.00	0.00	C
	ATOM	2701	CD	ARG	A	354	39.522	53.414	30.657	1.00	0.00	C
	ATOM	2702	NE	ARG	A	354	39.847	54.424	31.664	1.00	0.00	N
40	ATOM	2703	CZ	ARG	A	354	39.646	54.280	32.972	1.00	0.00	C
	ATOM	2704	NH1	ARG	A	354	39.117	53.161	33.449	1.00	0.00	N
	ATOM	2705	NH2	ARG	A	354	39.983	55.254	33.806	1.00	0.00	N
45	ATOM	2706	N	VAL	A	355	35.155	54.563	32.065	1.00	0.00	N
	ATOM	2707	CA	VAL	A	355	34.634	54.082	33.343	1.00	0.00	C
	ATOM	2708	C	VAL	A	355	33.207	53.555	33.256	1.00	0.00	C
50	ATOM	2709	O	VAL	A	355	32.910	52.458	33.738	1.00	0.00	O
	ATOM	2710	CB	VAL	A	355	34.696	55.187	34.423	1.00	0.00	C
	ATOM	2711	CG1	VAL	A	355	34.025	54.705	35.705	1.00	0.00	C
55	ATOM	2712	CG2	VAL	A	355	36.151	55.549	34.709	1.00	0.00	C
	ATOM	2713	N	ASN	A	356	32.321	54.331	32.647	1.00	0.00	N
	ATOM	2714	CA	ASN	A	356	30.940	53.901	32.525	1.00	0.00	C
60	ATOM	2715	C	ASN	A	356	30.803	52.631	31.696	1.00	0.00	C
	ATOM	2716	O	ASN	A	356	30.020	51.746	32.042	1.00	0.00	O
	ATOM	2717	CB	ASN	A	356	30.091	55.033	31.953	1.00	0.00	C
65	ATOM	2718	CG	ASN	A	356	29.785	56.094	32.990	1.00	0.00	C
	ATOM	2719	OD1	ASN	A	356	29.072	55.834	33.962	1.00	0.00	O
	ATOM	2720	ND2	ASN	A	356	30.338	57.290	32.803	1.00	0.00	N
70	ATOM	2721	N	TYR	A	357	31.568	52.522	30.613	1.00	0.00	N
	ATOM	2722	CA	TYR	A	357	31.490	51.317	29.797	1.00	0.00	C
	ATOM	2723	C	TYR	A	357	32.099	50.109	30.507	1.00	0.00	C
75	ATOM	2724	O	TYR	A	357	31.646	48.980	30.318	1.00	0.00	O
	ATOM	2725	CB	TYR	A	357	32.144	51.538	28.427	1.00	0.00	C
	ATOM	2726	CG	TYR	A	357	31.150	52.056	27.413	1.00	0.00	C
80	ATOM	2727	CD1	TYR	A	357	30.957	53.425	27.225	1.00	0.00	C
	ATOM	2728	CD2	TYR	A	357	30.339	51.172	26.701	1.00	0.00	C
	ATOM	2729	CE1	TYR	A	357	29.978	53.901	26.355	1.00	0.00	C
85	ATOM	2730	CE2	TYR	A	357	29.355	51.635	25.835	1.00	0.00	C
	ATOM	2731	CZ	TYR	A	357	29.177	52.999	25.666	1.00	0.00	C
	ATOM	2732	OH	TYR	A	357	28.192	53.452	24.820	1.00	0.00	O
90	ATOM	2733	N	GLU	A	358	33.115	50.339	31.330	1.00	0.00	N
	ATOM	2734	CA	GLU	A	358	33.719	49.235	32.072	1.00	0.00	C
	ATOM	2735	C	GLU	A	358	32.679	48.654	33.037	1.00	0.00	C
95	ATOM	2736	O	GLU	A	358	32.625	47.443	33.252	1.00	0.00	O
	ATOM	2737	CB	GLU	A	358	34.938	49.712	32.863	1.00	0.00	C
	ATOM	2738	CG	GLU	A	358	36.196	49.918	32.026	1.00	0.00	C
100	ATOM	2739	CD	GLU	A	358	37.382	50.357	32.867	1.00	0.00	C
	ATOM	2740	OE1	GLU	A	358	37.246	50.416	34.108	1.00	0.00	O
	ATOM	2741	OE2	GLU	A	358	38.453	50.640	32.293	1.00	0.00	O
	ATOM	2742	N	ARG	A	359	31.853	49.521	33.617	1.00	0.00	N

5	ATOM	2743	CA	ARG	A	359	30.816	49.068	34.545	1.00	0.00	C
	ATOM	2744	C	ARG	A	359	29.770	48.240	33.816	1.00	0.00	C
	ATOM	2745	O	ARG	A	359	29.298	47.222	34.331	1.00	0.00	O
	ATOM	2746	CB	ARG	A	359	30.145	50.263	35.222	1.00	0.00	C
	ATOM	2747	CG	ARG	A	359	31.033	50.954	36.227	1.00	0.00	C
10	ATOM	2748	CD	ARG	A	359	30.421	52.258	36.699	1.00	0.00	C
	ATOM	2749	NE	ARG	A	359	31.337	52.979	37.576	1.00	0.00	N
	ATOM	2750	CZ	ARG	A	359	31.406	54.303	37.650	1.00	0.00	C
	ATOM	2751	NH1	ARG	A	359	30.608	55.050	36.895	1.00	0.00	N
	ATOM	2752	NH2	ARG	A	359	32.278	54.880	38.471	1.00	0.00	N
15	ATOM	2753	N	LEU	A	360	29.412	48.679	32.613	1.00	0.00	N
	ATOM	2754	CA	LEU	A	360	28.429	47.965	31.810	1.00	0.00	C
	ATOM	2755	C	LEU	A	360	28.953	46.595	31.389	1.00	0.00	C
	ATOM	2756	O	LEU	A	360	28.221	45.606	31.441	1.00	0.00	O
	ATOM	2757	CB	LEU	A	360	28.058	48.789	30.576	1.00	0.00	C
20	ATOM	2758	CG	LEU	A	360	27.224	50.045	30.849	1.00	0.00	C
	ATOM	2759	CD1	LEU	A	360	27.168	50.914	29.600	1.00	0.00	C
	ATOM	2760	CD2	LEU	A	360	25.818	49.640	31.287	1.00	0.00	C
	ATOM	2761	N	PHE	A	361	30.217	46.537	30.975	1.00	0.00	N
	ATOM	2762	CA	PHE	A	361	30.830	45.276	30.559	1.00	0.00	C
25	ATOM	2763	C	PHE	A	361	30.896	44.266	31.706	1.00	0.00	C
	ATOM	2764	O	PHE	A	361	30.557	43.094	31.530	1.00	0.00	O
	ATOM	2765	CB	PHE	A	361	32.252	45.513	30.035	1.00	0.00	C
	ATOM	2766	CG	PHE	A	361	32.316	46.321	28.766	1.00	0.00	C
	ATOM	2767	CD1	PHE	A	361	33.510	46.923	28.376	1.00	0.00	C
30	ATOM	2768	CD2	PHE	A	361	31.191	46.482	27.963	1.00	0.00	C
	ATOM	2769	CE1	PHE	A	361	33.584	47.674	27.206	1.00	0.00	C
	ATOM	2770	CE2	PHE	A	361	31.253	47.232	26.787	1.00	0.00	C
	ATOM	2771	CZ	PHE	A	361	32.451	47.828	26.410	1.00	0.00	C
	ATOM	2772	N	GLU	A	362	31.346	44.712	32.876	1.00	0.00	N
35	ATOM	2773	CA	GLU	A	362	31.456	43.803	34.013	1.00	0.00	C
	ATOM	2774	C	GLU	A	362	30.106	43.174	34.341	1.00	0.00	C
	ATOM	2775	O	GLU	A	362	30.012	41.966	34.554	1.00	0.00	O
	ATOM	2776	CB	GLU	A	362	31.991	44.526	35.252	1.00	0.00	C
	ATOM	2777	CG	GLU	A	362	32.334	43.567	36.393	1.00	0.00	C
40	ATOM	2778	CD	GLU	A	362	32.739	44.280	37.669	1.00	0.00	C
	ATOM	2779	OE1	GLU	A	362	33.486	45.274	37.581	1.00	0.00	O
	ATOM	2780	OE2	GLU	A	362	32.321	43.836	38.761	1.00	0.00	O
	ATOM	2781	N	HIS	A	363	29.062	43.994	34.375	1.00	0.00	N
	ATOM	2782	CA	HIS	A	363	27.731	43.489	34.679	1.00	0.00	C
45	ATOM	2783	C	HIS	A	363	27.232	42.536	33.598	1.00	0.00	C
	ATOM	2784	O	HIS	A	363	26.919	41.376	33.869	1.00	0.00	O
	ATOM	2785	CB	HIS	A	363	26.735	44.641	34.817	1.00	0.00	C
	ATOM	2786	CG	HIS	A	363	25.354	44.197	35.187	1.00	0.00	C
	ATOM	2787	ND1	HIS	A	363	25.047	43.680	36.428	1.00	0.00	N
50	ATOM	2788	CD2	HIS	A	363	24.205	44.159	34.469	1.00	0.00	C
	ATOM	2789	CE1	HIS	A	363	23.769	43.343	36.458	1.00	0.00	C
	ATOM	2790	NE2	HIS	A	363	23.236	43.624	35.283	1.00	0.00	N
	ATOM	2791	N	ILE	A	364	27.159	43.037	32.371	1.00	0.00	N
	ATOM	2792	CA	ILE	A	364	26.677	42.245	31.250	1.00	0.00	C
55	ATOM	2793	C	ILE	A	364	27.396	40.910	31.084	1.00	0.00	C
	ATOM	2794	O	ILE	A	364	26.751	39.871	30.935	1.00	0.00	O
	ATOM	2795	CB	ILE	A	364	26.782	43.039	29.931	1.00	0.00	C
	ATOM	2796	CG1	ILE	A	364	25.893	44.286	30.006	1.00	0.00	C
	ATOM	2797	CG2	ILE	A	364	26.360	42.157	28.753	1.00	0.00	C
60	ATOM	2798	CD1	ILE	A	364	26.022	45.206	28.813	1.00	0.00	C
	ATOM	2799	N	ASN	A	365	28.724	40.929	31.119	1.00	0.00	N
	ATOM	2800	CA	ASN	A	365	29.489	39.699	30.943	1.00	0.00	C
	ATOM	2801	C	ASN	A	365	29.351	38.702	32.094	1.00	0.00	C
	ATOM	2802	O	ASN	A	365	29.660	37.523	31.929	1.00	0.00	O
	ATOM	2803	CB	ASN	A	365	30.968	40.020	30.714	1.00	0.00	C

5	ATOM	2804	CG	ASN	A	365	31.189	40.887	29.488	1.00	0.00	C
	ATOM	2805	OD1	ASN	A	365	30.295	41.042	28.658	1.00	0.00	O
	ATOM	2806	ND2	ASN	A	365	32.385	41.452	29.366	1.00	0.00	N
	ATOM	2807	N	SER	A	366	28.877	39.167	33.247	1.00	0.00	N
	ATOM	2808	CA	SER	A	366	28.710	38.292	34.407	1.00	0.00	C
10	ATOM	2809	C	SER	A	366	27.261	37.837	34.581	1.00	0.00	C
	ATOM	2810	O	SER	A	366	26.957	37.032	35.458	1.00	0.00	O
	ATOM	2811	CB	SER	A	366	29.187	39.001	35.682	1.00	0.00	C
	ATOM	2812	OG	SER	A	366	28.375	40.123	35.976	1.00	0.00	O
	ATOM	2813	N	GLN	A	367	26.370	38.361	33.745	1.00	0.00	N
15	ATOM	2814	CA	GLN	A	367	24.956	37.997	33.786	1.00	0.00	C
	ATOM	2815	C	GLN	A	367	24.661	37.028	32.642	1.00	0.00	C
	ATOM	2816	O	GLN	A	367	24.324	37.443	31.532	1.00	0.00	O
	ATOM	2817	CB	GLN	A	367	24.077	39.244	33.646	1.00	0.00	C
	ATOM	2818	CG	GLN	A	367	24.108	40.172	34.852	1.00	0.00	C
20	ATOM	2819	CD	GLN	A	367	23.519	39.525	36.092	1.00	0.00	C
	ATOM	2820	OE1	GLN	A	367	22.338	39.171	36.121	1.00	0.00	O
	ATOM	2821	NE2	GLN	A	367	24.342	39.362	37.122	1.00	0.00	N
	ATOM	2822	N	ALA	A	368	24.783	35.735	32.928	1.00	0.00	N
	ATOM	2823	CA	ALA	A	368	24.557	34.686	31.937	1.00	0.00	C
25	ATOM	2824	C	ALA	A	368	23.297	34.849	31.087	1.00	0.00	C
	ATOM	2825	O	ALA	A	368	23.317	34.571	29.888	1.00	0.00	O
	ATOM	2826	CB	ALA	A	368	24.538	33.323	32.629	1.00	0.00	C
	ATOM	2827	N	HIS	A	369	22.204	35.296	31.699	1.00	0.00	N
	ATOM	2828	CA	HIS	A	369	20.946	35.458	30.973	1.00	0.00	C
30	ATOM	2829	C	HIS	A	369	21.064	36.370	29.748	1.00	0.00	C
	ATOM	2830	O	HIS	A	369	20.220	36.328	28.852	1.00	0.00	O
	ATOM	2831	CB	HIS	A	369	19.856	35.973	31.920	1.00	0.00	C
	ATOM	2832	CG	HIS	A	369	20.040	37.396	32.344	1.00	0.00	C
	ATOM	2833	ND1	HIS	A	369	19.595	38.460	31.589	1.00	0.00	N
35	ATOM	2834	CD2	HIS	A	369	20.636	37.932	33.435	1.00	0.00	C
	ATOM	2835	CE1	HIS	A	369	19.909	39.590	32.198	1.00	0.00	C
	ATOM	2836	NE2	HIS	A	369	20.542	39.298	33.319	1.00	0.00	N
	ATOM	2837	N	PHE	A	370	22.107	37.193	29.707	1.00	0.00	N
	ATOM	2838	CA	PHE	A	370	22.316	38.085	28.569	1.00	0.00	C
40	ATOM	2839	C	PHE	A	370	22.956	37.314	27.422	1.00	0.00	C
	ATOM	2840	O	PHE	A	370	22.688	37.593	26.254	1.00	0.00	O
	ATOM	2841	CB	PHE	A	370	23.233	39.252	28.952	1.00	0.00	C
	ATOM	2842	CG	PHE	A	370	22.535	40.372	29.675	1.00	0.00	C
	ATOM	2843	CD1	PHE	A	370	23.086	40.916	30.829	1.00	0.00	C
45	ATOM	2844	CD2	PHE	A	370	21.345	40.903	29.188	1.00	0.00	C
	ATOM	2845	CE1	PHE	A	370	22.463	41.975	31.490	1.00	0.00	C
	ATOM	2846	CE2	PHE	A	370	20.713	41.964	29.842	1.00	0.00	C
	ATOM	2847	CZ	PHE	A	370	21.277	42.499	30.995	1.00	0.00	C
	ATOM	2848	N	ASN	A	371	23.795	36.342	27.773	1.00	0.00	N
50	ATOM	2849	CA	ASN	A	371	24.506	35.530	26.791	1.00	0.00	C
	ATOM	2850	C	ASN	A	371	25.303	36.431	25.854	1.00	0.00	C
	ATOM	2851	O	ASN	A	371	25.325	36.231	24.637	1.00	0.00	O
	ATOM	2852	CB	ASN	A	371	23.517	34.669	26.007	1.00	0.00	C
	ATOM	2853	CG	ASN	A	371	22.867	33.607	26.875	1.00	0.00	C
55	ATOM	2854	OD1	ASN	A	371	23.544	32.725	27.405	1.00	0.00	O
	ATOM	2855	ND2	ASN	A	371	21.552	33.692	27.031	1.00	0.00	N
	ATOM	2856	N	VAL	A	372	25.961	37.421	26.451	1.00	0.00	N
	ATOM	2857	CA	VAL	A	372	26.773	38.390	25.725	1.00	0.00	C
	ATOM	2858	C	VAL	A	372	28.142	38.559	26.374	1.00	0.00	C
60	ATOM	2859	O	VAL	A	372	28.272	38.515	27.597	1.00	0.00	O
	ATOM	2860	CB	VAL	A	372	26.092	39.785	25.702	1.00	0.00	C
	ATOM	2861	CG1	VAL	A	372	27.064	40.845	25.161	1.00	0.00	C
	ATOM	2862	CG2	VAL	A	372	24.830	39.736	24.858	1.00	0.00	C
	ATOM	2863	N	GLN	A	373	29.157	38.748	25.539	1.00	0.00	N
	ATOM	2864	CA	GLN	A	373	30.523	38.980	25.997	1.00	0.00	C

5	ATOM	2865	C	GLN	A	373	30.933	40.267	25.284	1.00	0.00	C
	ATOM	2866	O	GLN	A	373	31.176	40.262	24.081	1.00	0.00	O
	ATOM	2867	CB	GLN	A	373	31.438	37.822	25.583	1.00	0.00	C
	ATOM	2868	CG	GLN	A	373	32.919	38.014	25.925	1.00	0.00	C
	ATOM	2869	CD	GLN	A	373	33.155	38.334	27.398	1.00	0.00	C
10	ATOM	2870	OE1	GLN	A	373	32.519	37.757	28.281	1.00	0.00	O
	ATOM	2871	NE2	GLN	A	373	34.082	39.248	27.665	1.00	0.00	N
	ATOM	2872	N	ALA	A	374	30.985	41.369	26.025	1.00	0.00	N
	ATOM	2873	CA	ALA	A	374	31.329	42.660	25.444	1.00	0.00	C
	ATOM	2874	C	ALA	A	374	32.665	43.201	25.939	1.00	0.00	C
15	ATOM	2875	O	ALA	A	374	33.048	42.987	27.087	1.00	0.00	O
	ATOM	2876	CB	ALA	A	374	30.221	43.668	25.747	1.00	0.00	C
	ATOM	2877	N	GLN	A	375	33.369	43.917	25.068	1.00	0.00	N
	ATOM	2878	CA	GLN	A	375	34.653	44.500	25.437	1.00	0.00	C
	ATOM	2879	C	GLN	A	375	35.084	45.552	24.429	1.00	0.00	C
20	ATOM	2880	O	GLN	A	375	34.526	45.641	23.336	1.00	0.00	O
	ATOM	2881	CB	GLN	A	375	35.739	43.421	25.506	1.00	0.00	C
	ATOM	2882	CG	GLN	A	375	35.930	42.638	24.209	1.00	0.00	C
	ATOM	2883	CD	GLN	A	375	35.048	41.409	24.145	1.00	0.00	C
	ATOM	2884	OE1	GLN	A	375	35.186	40.494	24.962	1.00	0.00	O
25	ATOM	2885	NE2	GLN	A	375	34.131	41.379	23.180	1.00	0.00	N
	ATOM	2886	N	PHE	A	376	36.070	46.359	24.810	1.00	0.00	N
	ATOM	2887	CA	PHE	A	376	36.600	47.362	23.900	1.00	0.00	C
	ATOM	2888	C	PHE	A	376	37.395	46.571	22.874	1.00	0.00	C
	ATOM	2889	O	PHE	A	376	38.023	45.567	23.212	1.00	0.00	O
30	ATOM	2890	CB	PHE	A	376	37.540	48.327	24.630	1.00	0.00	C
	ATOM	2891	CG	PHE	A	376	36.846	49.231	25.606	1.00	0.00	C
	ATOM	2892	CD1	PHE	A	376	37.245	49.273	26.936	1.00	0.00	C
	ATOM	2893	CD2	PHE	A	376	35.797	50.049	25.194	1.00	0.00	C
	ATOM	2894	CE1	PHE	A	376	36.611	50.114	27.846	1.00	0.00	C
35	ATOM	2895	CE2	PHE	A	376	35.156	50.896	26.100	1.00	0.00	C
	ATOM	2896	CZ	PHE	A	376	35.567	50.926	27.429	1.00	0.00	C
	ATOM	2897	N	GLY	A	377	37.366	47.011	21.622	1.00	0.00	N
	ATOM	2898	CA	GLY	A	377	38.115	46.309	20.598	1.00	0.00	C
	ATOM	2899	C	GLY	A	377	38.540	47.242	19.486	1.00	0.00	C
40	ATOM	2900	O	GLY	A	377	38.222	48.431	19.510	1.00	0.00	O
	ATOM	2901	N	THR	A	378	39.277	46.706	18.521	1.00	0.00	N
	ATOM	2902	CA	THR	A	378	39.716	47.493	17.380	1.00	0.00	C
	ATOM	2903	C	THR	A	378	38.965	46.972	16.164	1.00	0.00	C
	ATOM	2904	O	THR	A	378	38.287	45.940	16.235	1.00	0.00	O
45	ATOM	2905	CB	THR	A	378	41.229	47.347	17.123	1.00	0.00	C
	ATOM	2906	OG1	THR	A	378	41.521	46.002	16.731	1.00	0.00	O
	ATOM	2907	CG2	THR	A	378	42.017	47.693	18.379	1.00	0.00	C
	ATOM	2908	N	LEU	A	379	39.082	47.684	15.052	1.00	0.00	N
	ATOM	2909	CA	LEU	A	379	38.408	47.287	13.825	1.00	0.00	C
50	ATOM	2910	C	LEU	A	379	38.898	45.923	13.337	1.00	0.00	C
	ATOM	2911	O	LEU	A	379	38.102	45.072	12.931	1.00	0.00	O
	ATOM	2912	CB	LEU	A	379	38.645	48.338	12.739	1.00	0.00	C
	ATOM	2913	CG	LEU	A	379	37.862	48.125	11.447	1.00	0.00	C
	ATOM	2914	CD1	LEU	A	379	36.364	48.180	11.746	1.00	0.00	C
55	ATOM	2915	CD2	LEU	A	379	38.261	49.198	10.432	1.00	0.00	C
	ATOM	2916	N	GLN	A	380	40.211	45.714	13.383	1.00	0.00	N
	ATOM	2917	CA	GLN	A	380	40.783	44.449	12.936	1.00	0.00	C
	ATOM	2918	C	GLN	A	380	40.287	43.287	13.794	1.00	0.00	C
	ATOM	2919	O	GLN	A	380	40.051	42.189	13.287	1.00	0.00	O
60	ATOM	2920	CB	GLN	A	380	42.311	44.512	12.982	1.00	0.00	C
	ATOM	2921	CG	GLN	A	380	42.989	43.294	12.377	1.00	0.00	C
	ATOM	2922	CD	GLN	A	380	42.587	43.071	10.931	1.00	0.00	C
	ATOM	2923	OE1	GLN	A	380	42.667	43.983	10.104	1.00	0.00	O
	ATOM	2924	NE2	GLN	A	380	42.156	41.851	10.616	1.00	0.00	N
	ATOM	2925	N	GLU	A	381	40.133	43.527	15.094	1.00	0.00	N

5	ATOM	2926	CA	GLU	A	381	39.659	42.481	15.990	1.00	0.00	C
	ATOM	2927	C	GLU	A	381	38.258	42.049	15.576	1.00	0.00	C
	ATOM	2928	O	GLU	A	381	37.941	40.862	15.576	1.00	0.00	O
	ATOM	2929	CB	GLU	A	381	39.653	42.969	17.444	1.00	0.00	C
	ATOM	2930	CG	GLU	A	381	41.045	43.317	17.967	1.00	0.00	C
10	ATOM	2931	CD	GLU	A	381	41.068	43.599	19.460	1.00	0.00	C
	ATOM	2932	OE1	GLU	A	381	40.251	44.411	19.931	1.00	0.00	O
	ATOM	2933	OE2	GLU	A	381	41.919	43.012	20.161	1.00	0.00	O
	ATOM	2934	N	TYR	A	382	37.420	43.019	15.225	1.00	0.00	N
	ATOM	2935	CA	TYR	A	382	36.065	42.716	14.794	1.00	0.00	C
15	ATOM	2936	C	TYR	A	382	36.081	41.821	13.554	1.00	0.00	C
	ATOM	2937	O	TYR	A	382	35.454	40.762	13.530	1.00	0.00	O
	ATOM	2938	CB	TYR	A	382	35.300	43.999	14.464	1.00	0.00	C
	ATOM	2939	CG	TYR	A	382	33.991	43.723	13.760	1.00	0.00	C
	ATOM	2940	CD1	TYR	A	382	32.937	43.095	14.429	1.00	0.00	C
20	ATOM	2941	CD2	TYR	A	382	33.830	44.020	12.405	1.00	0.00	C
	ATOM	2942	CE1	TYR	A	382	31.754	42.762	13.764	1.00	0.00	C
	ATOM	2943	CE2	TYR	A	382	32.654	43.691	11.731	1.00	0.00	C
	ATOM	2944	CZ	TYR	A	382	31.622	43.058	12.418	1.00	0.00	C
	ATOM	2945	OH	TYR	A	382	30.469	42.701	11.750	1.00	0.00	O
25	ATOM	2946	N	PHE	A	383	36.791	42.257	12.519	1.00	0.00	N
	ATOM	2947	CA	PHE	A	383	36.859	41.488	11.282	1.00	0.00	C
	ATOM	2948	C	PHE	A	383	37.454	40.088	11.470	1.00	0.00	C
	ATOM	2949	O	PHE	A	383	36.976	39.122	10.870	1.00	0.00	O
	ATOM	2950	CB	PHE	A	383	37.648	42.269	10.220	1.00	0.00	C
30	ATOM	2951	CG	PHE	A	383	36.872	43.407	9.599	1.00	0.00	C
	ATOM	2952	CD1	PHE	A	383	37.365	44.705	9.641	1.00	0.00	C
	ATOM	2953	CD2	PHE	A	383	35.655	43.173	8.962	1.00	0.00	C
	ATOM	2954	CE1	PHE	A	383	36.662	45.762	9.057	1.00	0.00	C
	ATOM	2955	CE2	PHE	A	383	34.938	44.218	8.372	1.00	0.00	C
35	ATOM	2956	CZ	PHE	A	383	35.444	45.518	8.419	1.00	0.00	C
	ATOM	2957	N	ASP	A	384	38.490	39.968	12.297	1.00	0.00	N
	ATOM	2958	CA	ASP	A	384	39.094	38.655	12.535	1.00	0.00	C
	ATOM	2959	C	ASP	A	384	38.050	37.702	13.109	1.00	0.00	C
	ATOM	2960	O	ASP	A	384	37.958	36.545	12.699	1.00	0.00	O
40	ATOM	2961	CB	ASP	A	384	40.266	38.753	13.514	1.00	0.00	C
	ATOM	2962	CG	ASP	A	384	41.499	39.382	12.897	1.00	0.00	C
	ATOM	2963	OD1	ASP	A	384	41.577	39.469	11.652	1.00	0.00	O
	ATOM	2964	OD2	ASP	A	384	42.400	39.775	13.667	1.00	0.00	O
	ATOM	2965	N	ALA	A	385	37.261	38.198	14.057	1.00	0.00	N
45	ATOM	2966	CA	ALA	A	385	36.223	37.391	14.691	1.00	0.00	C
	ATOM	2967	C	ALA	A	385	35.143	37.007	13.684	1.00	0.00	C
	ATOM	2968	O	ALA	A	385	34.686	35.863	13.652	1.00	0.00	O
	ATOM	2969	CB	ALA	A	385	35.605	38.155	15.862	1.00	0.00	C
	ATOM	2970	N	VAL	A	386	34.731	37.965	12.862	1.00	0.00	N
50	ATOM	2971	CA	VAL	A	386	33.715	37.695	11.851	1.00	0.00	C
	ATOM	2972	C	VAL	A	386	34.149	36.546	10.939	1.00	0.00	C
	ATOM	2973	O	VAL	A	386	33.385	35.608	10.689	1.00	0.00	O
	ATOM	2974	CB	VAL	A	386	33.447	38.938	10.982	1.00	0.00	C
	ATOM	2975	CG1	VAL	A	386	32.555	38.564	9.794	1.00	0.00	C
55	ATOM	2976	CG2	VAL	A	386	32.782	40.018	11.823	1.00	0.00	C
	ATOM	2977	N	HIS	A	387	35.379	36.612	10.447	1.00	0.00	N
	ATOM	2978	CA	HIS	A	387	35.867	35.570	9.562	1.00	0.00	C
	ATOM	2979	C	HIS	A	387	36.092	34.244	10.280	1.00	0.00	C
	ATOM	2980	O	HIS	A	387	36.062	33.181	9.657	1.00	0.00	O
60	ATOM	2981	CB	HIS	A	387	37.125	36.055	8.843	1.00	0.00	C
	ATOM	2982	CG	HIS	A	387	36.852	37.170	7.882	1.00	0.00	C
	ATOM	2983	ND1	HIS	A	387	36.009	37.024	6.800	1.00	0.00	N
	ATOM	2984	CD2	HIS	A	387	37.263	38.461	7.867	1.00	0.00	C
	ATOM	2985	CE1	HIS	A	387	35.912	38.177	6.162	1.00	0.00	C
	ATOM	2986	NE2	HIS	A	387	36.663	39.065	6.790	1.00	0.00	N

5	ATOM	2987	N	GLN	A	388	36.304	34.303	11.590	1.00	0.00	N
	ATOM	2988	CA	GLN	A	388	36.474	33.083	12.367	1.00	0.00	C
	ATOM	2989	C	GLN	A	388	35.105	32.397	12.401	1.00	0.00	C
	ATOM	2990	O	GLN	A	388	35.007	31.173	12.317	1.00	0.00	O
	ATOM	2991	CB	GLN	A	388	36.943	33.411	13.789	1.00	0.00	C
10	ATOM	2992	CG	GLN	A	388	38.442	33.684	13.910	1.00	0.00	C
	ATOM	2993	CD	GLN	A	388	38.816	34.342	15.235	1.00	0.00	C
	ATOM	2994	OE1	GLN	A	388	38.248	34.024	16.281	1.00	0.00	O
	ATOM	2995	NE2	GLN	A	388	39.783	35.256	15.194	1.00	0.00	N
	ATOM	2996	N	ALA	A	389	34.049	33.199	12.508	1.00	0.00	N
15	ATOM	2997	CA	ALA	A	389	32.686	32.674	12.536	1.00	0.00	C
	ATOM	2998	C	ALA	A	389	32.342	32.106	11.163	1.00	0.00	C
	ATOM	2999	O	ALA	A	389	31.688	31.064	11.050	1.00	0.00	O
	ATOM	3000	CB	ALA	A	389	31.705	33.780	12.911	1.00	0.00	C
	ATOM	3001	N	GLU	A	390	32.792	32.803	10.125	1.00	0.00	N
20	ATOM	3002	CA	GLU	A	390	32.565	32.398	8.743	1.00	0.00	C
	ATOM	3003	C	GLU	A	390	33.197	31.033	8.487	1.00	0.00	C
	ATOM	3004	O	GLU	A	390	32.569	30.144	7.910	1.00	0.00	O
	ATOM	3005	CB	GLU	A	390	33.168	33.445	7.798	1.00	0.00	C
	ATOM	3006	CG	GLU	A	390	33.255	33.036	6.331	1.00	0.00	C
25	ATOM	3007	CD	GLU	A	390	33.859	34.133	5.464	1.00	0.00	C
	ATOM	3008	OE1	GLU	A	390	34.757	34.847	5.956	1.00	0.00	O
	ATOM	3009	OE2	GLU	A	390	33.447	34.275	4.292	1.00	0.00	O
	ATOM	3010	N	ARG	A	391	34.443	30.876	8.921	1.00	0.00	N
	ATOM	3011	CA	ARG	A	391	35.163	29.622	8.746	1.00	0.00	C
30	ATOM	3012	C	ARG	A	391	34.519	28.504	9.560	1.00	0.00	C
	ATOM	3013	O	ARG	A	391	34.611	27.330	9.200	1.00	0.00	O
	ATOM	3014	CB	ARG	A	391	36.628	29.790	9.160	1.00	0.00	C
	ATOM	3015	CG	ARG	A	391	37.475	30.565	8.159	1.00	0.00	C
	ATOM	3016	CD	ARG	A	391	38.908	30.719	8.652	1.00	0.00	C
35	ATOM	3017	NE	ARG	A	391	38.993	31.636	9.785	1.00	0.00	N
	ATOM	3018	CZ	ARG	A	391	40.086	31.827	10.515	1.00	0.00	C
	ATOM	3019	NH1	ARG	A	391	41.201	31.162	10.238	1.00	0.00	N
	ATOM	3020	NH2	ARG	A	391	40.066	32.688	11.524	1.00	0.00	N
	ATOM	3021	N	ALA	A	392	33.870	28.871	10.660	1.00	0.00	N
40	ATOM	3022	CA	ALA	A	392	33.204	27.891	11.510	1.00	0.00	C
	ATOM	3023	C	ALA	A	392	31.932	27.419	10.814	1.00	0.00	C
	ATOM	3024	O	ALA	A	392	31.255	26.500	11.281	1.00	0.00	O
	ATOM	3025	CB	ALA	A	392	32.870	28.508	12.863	1.00	0.00	C
	ATOM	3026	N	GLY	A	393	31.612	28.064	9.695	1.00	0.00	N
45	ATOM	3027	CA	GLY	A	393	30.432	27.701	8.935	1.00	0.00	C
	ATOM	3028	C	GLY	A	393	29.122	28.243	9.473	1.00	0.00	C
	ATOM	3029	O	GLY	A	393	28.063	27.676	9.206	1.00	0.00	O
	ATOM	3030	N	GLN	A	394	29.170	29.338	10.225	1.00	0.00	N
	ATOM	3031	CA	GLN	A	394	27.937	29.897	10.760	1.00	0.00	C
50	ATOM	3032	C	GLN	A	394	27.377	31.012	9.883	1.00	0.00	C
	ATOM	3033	O	GLN	A	394	26.321	31.566	10.180	1.00	0.00	O
	ATOM	3034	CB	GLN	A	394	28.140	30.410	12.191	1.00	0.00	C
	ATOM	3035	CG	GLN	A	394	28.877	31.728	12.312	1.00	0.00	C
	ATOM	3036	CD	GLN	A	394	28.757	32.324	13.707	1.00	0.00	C
55	ATOM	3037	OE1	GLN	A	394	29.229	31.746	14.689	1.00	0.00	O
	ATOM	3038	NE2	GLN	A	394	28.114	33.483	13.799	1.00	0.00	N
	ATOM	3039	N	ALA	A	395	28.072	31.333	8.795	1.00	0.00	N
	ATOM	3040	CA	ALA	A	395	27.606	32.383	7.898	1.00	0.00	C
	ATOM	3041	C	ALA	A	395	28.251	32.344	6.517	1.00	0.00	C
60	ATOM	3042	O	ALA	A	395	29.421	31.995	6.369	1.00	0.00	O
	ATOM	3043	CB	ALA	A	395	27.840	33.750	8.538	1.00	0.00	C
	ATOM	3044	N	GLU	A	396	27.463	32.700	5.509	1.00	0.00	N
	ATOM	3045	CA	GLU	A	396	27.921	32.752	4.126	1.00	0.00	C
	ATOM	3046	C	GLU	A	396	27.614	34.180	3.696	1.00	0.00	C
	ATOM	3047	O	GLU	A	396	26.528	34.688	3.980	1.00	0.00	O

5	ATOM	3048	CB	GLU	A	396	27.135	31.766	3.256	1.00	0.00	C
	ATOM	3049	CG	GLU	A	396	26.450	30.641	4.026	1.00	0.00	C
	ATOM	3050	CD	GLU	A	396	25.095	31.053	4.591	1.00	0.00	C
	ATOM	3051	OE1	GLU	A	396	25.037	32.008	5.400	1.00	0.00	O
	ATOM	3052	OE2	GLU	A	396	24.083	30.417	4.221	1.00	0.00	O
10	ATOM	3053	N	PHE	A	397	28.553	34.835	3.025	1.00	0.00	N
	ATOM	3054	CA	PHE	A	397	28.321	36.215	2.620	1.00	0.00	C
	ATOM	3055	C	PHE	A	397	27.997	36.401	1.147	1.00	0.00	C
	ATOM	3056	O	PHE	A	397	28.569	35.744	0.281	1.00	0.00	O
	ATOM	3057	CB	PHE	A	397	29.520	37.087	2.999	1.00	0.00	C
15	ATOM	3058	CG	PHE	A	397	29.773	37.145	4.477	1.00	0.00	C
	ATOM	3059	CD1	PHE	A	397	30.811	36.417	5.047	1.00	0.00	C
	ATOM	3060	CD2	PHE	A	397	28.952	37.905	5.303	1.00	0.00	C
	ATOM	3061	CE1	PHE	A	397	31.030	36.444	6.429	1.00	0.00	C
	ATOM	3062	CE2	PHE	A	397	29.160	37.940	6.682	1.00	0.00	C
20	ATOM	3063	CZ	PHE	A	397	30.201	37.206	7.245	1.00	0.00	C
	ATOM	3064	N	PRO	A	398	27.070	37.322	0.849	1.00	0.00	N
	ATOM	3065	CA	PRO	A	398	26.654	37.611	-0.522	1.00	0.00	C
	ATOM	3066	C	PRO	A	398	27.725	38.385	-1.291	1.00	0.00	C
	ATOM	3067	O	PRO	A	398	28.587	39.037	-0.692	1.00	0.00	O
25	ATOM	3068	CB	PRO	A	398	25.386	38.428	-0.318	1.00	0.00	C
	ATOM	3069	CG	PRO	A	398	25.728	39.233	0.898	1.00	0.00	C
	ATOM	3070	CD	PRO	A	398	26.358	38.190	1.806	1.00	0.00	C
	ATOM	3071	N	THR	A	399	27.666	38.294	-2.616	1.00	0.00	N
	ATOM	3072	CA	THR	A	399	28.598	38.994	-3.490	1.00	0.00	C
30	ATOM	3073	C	THR	A	399	27.876	40.240	-3.990	1.00	0.00	C
	ATOM	3074	O	THR	A	399	26.647	40.260	-4.077	1.00	0.00	O
	ATOM	3075	CB	THR	A	399	29.000	38.127	-4.694	1.00	0.00	C
	ATOM	3076	OG1	THR	A	399	27.821	37.692	-5.387	1.00	0.00	O
	ATOM	3077	CG2	THR	A	399	29.798	36.923	-4.231	1.00	0.00	C
35	ATOM	3078	N	LEU	A	400	28.632	41.280	-4.318	1.00	0.00	N
	ATOM	3079	CA	LEU	A	400	28.017	42.519	-4.779	1.00	0.00	C
	ATOM	3080	C	LEU	A	400	28.941	43.319	-5.680	1.00	0.00	C
	ATOM	3081	O	LEU	A	400	30.160	43.292	-5.511	1.00	0.00	O
	ATOM	3082	CB	LEU	A	400	27.615	43.364	-3.560	1.00	0.00	C
40	ATOM	3083	CG	LEU	A	400	26.959	44.742	-3.738	1.00	0.00	C
	ATOM	3084	CD1	LEU	A	400	26.173	45.078	-2.487	1.00	0.00	C
	ATOM	3085	CD2	LEU	A	400	28.008	45.816	-4.013	1.00	0.00	C
	ATOM	3086	N	SER	A	401	28.354	44.003	-6.659	1.00	0.00	N
	ATOM	3087	CA	SER	A	401	29.115	44.862	-7.562	1.00	0.00	C
45	ATOM	3088	C	SER	A	401	28.278	46.126	-7.742	1.00	0.00	C
	ATOM	3089	O	SER	A	401	27.057	46.092	-7.574	1.00	0.00	O
	ATOM	3090	CB	SER	A	401	29.352	44.191	-8.922	1.00	0.00	C
	ATOM	3091	OG	SER	A	401	28.184	44.208	-9.721	1.00	0.00	O
	ATOM	3092	N	GLY	A	402	28.937	47.234	-8.073	1.00	0.00	N
50	ATOM	3093	CA	GLY	A	402	28.238	48.495	-8.259	1.00	0.00	C
	ATOM	3094	C	GLY	A	402	28.819	49.577	-7.364	1.00	0.00	C
	ATOM	3095	O	GLY	A	402	29.842	49.360	-6.715	1.00	0.00	O
	ATOM	3096	N	ASP	A	403	28.178	50.741	-7.325	1.00	0.00	N
	ATOM	3097	CA	ASP	A	403	28.661	51.833	-6.489	1.00	0.00	C
55	ATOM	3098	C	ASP	A	403	27.554	52.332	-5.568	1.00	0.00	C
	ATOM	3099	O	ASP	A	403	26.442	51.795	-5.567	1.00	0.00	O
	ATOM	3100	CB	ASP	A	403	29.179	52.983	-7.364	1.00	0.00	C
	ATOM	3101	CG	ASP	A	403	28.065	53.735	-8.070	1.00	0.00	C
	ATOM	3102	OD1	ASP	A	403	26.966	53.170	-8.232	1.00	0.00	O
60	ATOM	3103	OD2	ASP	A	403	28.294	54.893	-8.475	1.00	0.00	O
	ATOM	3104	N	PHE	A	404	27.862	53.355	-4.780	1.00	0.00	N
	ATOM	3105	CA	PHE	A	404	26.886	53.913	-3.863	1.00	0.00	C
	ATOM	3106	C	PHE	A	404	26.735	55.422	-4.002	1.00	0.00	C
	ATOM	3107	O	PHE	A	404	26.906	56.178	-3.046	1.00	0.00	O
	ATOM	3108	CB	PHE	A	404	27.234	53.526	-2.421	1.00	0.00	C

5	ATOM	3109	CG	PHE	A	404	27.207	52.036	-2.182	1.00	0.00	C
	ATOM	3110	CD1	PHE	A	404	28.380	51.288	-2.212	1.00	0.00	C
	ATOM	3111	CD2	PHE	A	404	25.997	51.378	-1.976	1.00	0.00	C
	ATOM	3112	CE1	PHE	A	404	28.350	49.899	-2.041	1.00	0.00	C
	ATOM	3113	CE2	PHE	A	404	25.953	49.990	-1.804	1.00	0.00	C
10	ATOM	3114	CZ	PHE	A	404	27.130	49.249	-1.836	1.00	0.00	C
	ATOM	3115	N	PHE	A	405	26.421	55.834	-5.228	1.00	0.00	N
	ATOM	3116	CA	PHE	A	405	26.172	57.229	-5.575	1.00	0.00	C
	ATOM	3117	C	PHE	A	405	24.818	57.168	-6.290	1.00	0.00	C
	ATOM	3118	O	PHE	A	405	24.541	56.185	-6.975	1.00	0.00	O
15	ATOM	3119	CB	PHE	A	405	27.236	57.749	-6.549	1.00	0.00	C
	ATOM	3120	CG	PHE	A	405	28.613	57.857	-5.955	1.00	0.00	C
	ATOM	3121	CD1	PHE	A	405	29.700	57.254	-6.584	1.00	0.00	C
	ATOM	3122	CD2	PHE	A	405	28.834	58.583	-4.786	1.00	0.00	C
	ATOM	3123	CE1	PHE	A	405	30.988	57.373	-6.055	1.00	0.00	C
20	ATOM	3124	CE2	PHE	A	405	30.121	58.707	-4.251	1.00	0.00	C
	ATOM	3125	CZ	PHE	A	405	31.196	58.101	-4.888	1.00	0.00	C
	ATOM	3126	N	THR	A	406	23.973	58.189	-6.153	1.00	0.00	N
	ATOM	3127	CA	THR	A	406	24.252	59.380	-5.363	1.00	0.00	C
	ATOM	3128	C	THR	A	406	23.610	59.282	-3.982	1.00	0.00	C
25	ATOM	3129	O	THR	A	406	22.440	58.917	-3.834	1.00	0.00	O
	ATOM	3130	CB	THR	A	406	23.746	60.643	-6.110	1.00	0.00	C
	ATOM	3131	OG1	THR	A	406	24.634	60.928	-7.200	1.00	0.00	O
	ATOM	3132	CG2	THR	A	406	23.673	61.847	-5.180	1.00	0.00	C
	ATOM	3133	N	TYR	A	407	24.405	59.608	-2.971	1.00	0.00	N
30	ATOM	3134	CA	TYR	A	407	23.987	59.564	-1.577	1.00	0.00	C
	ATOM	3135	C	TYR	A	407	22.894	60.561	-1.209	1.00	0.00	C
	ATOM	3136	O	TYR	A	407	22.834	61.669	-1.742	1.00	0.00	O
	ATOM	3137	CB	TYR	A	407	25.209	59.811	-0.696	1.00	0.00	C
	ATOM	3138	CG	TYR	A	407	24.941	59.975	0.786	1.00	0.00	C
35	ATOM	3139	CD1	TYR	A	407	24.453	58.918	1.554	1.00	0.00	C
	ATOM	3140	CD2	TYR	A	407	25.277	61.163	1.437	1.00	0.00	C
	ATOM	3141	CE1	TYR	A	407	24.321	59.037	2.941	1.00	0.00	C
	ATOM	3142	CE2	TYR	A	407	25.151	61.293	2.813	1.00	0.00	C
	ATOM	3143	CZ	TYR	A	407	24.681	60.229	3.562	1.00	0.00	C
40	ATOM	3144	OH	TYR	A	407	24.630	60.348	4.932	1.00	0.00	O
	ATOM	3145	N	ALA	A	408	22.032	60.137	-0.291	1.00	0.00	N
	ATOM	3146	CA	ALA	A	408	20.950	60.958	0.239	1.00	0.00	C
	ATOM	3147	C	ALA	A	408	20.844	60.512	1.689	1.00	0.00	C
	ATOM	3148	O	ALA	A	408	20.689	59.319	1.956	1.00	0.00	O
45	ATOM	3149	CB	ALA	A	408	19.640	60.684	-0.502	1.00	0.00	C
	ATOM	3150	N	ASP	A	409	20.959	61.449	2.626	1.00	0.00	N
	ATOM	3151	CA	ASP	A	409	20.881	61.086	4.035	1.00	0.00	C
	ATOM	3152	C	ASP	A	409	19.456	61.137	4.575	1.00	0.00	C
	ATOM	3153	O	ASP	A	409	19.160	60.548	5.613	1.00	0.00	O
50	ATOM	3154	CB	ASP	A	409	21.834	61.959	4.877	1.00	0.00	C
	ATOM	3155	CG	ASP	A	409	21.513	63.444	4.808	1.00	0.00	C
	ATOM	3156	OD1	ASP	A	409	20.928	63.893	3.802	1.00	0.00	O
	ATOM	3157	OD2	ASP	A	409	21.875	64.169	5.765	1.00	0.00	O
	ATOM	3158	N	ARG	A	410	18.574	61.824	3.853	1.00	0.00	N
55	ATOM	3159	CA	ARG	A	410	17.167	61.928	4.238	1.00	0.00	C
	ATOM	3160	C	ARG	A	410	16.320	62.561	3.137	1.00	0.00	C
	ATOM	3161	O	ARG	A	410	16.824	63.319	2.306	1.00	0.00	O
	ATOM	3162	CB	ARG	A	410	17.008	62.732	5.533	1.00	0.00	C
	ATOM	3163	CG	ARG	A	410	17.450	64.189	5.473	1.00	0.00	C
60	ATOM	3164	CD	ARG	A	410	17.319	64.801	6.863	1.00	0.00	C
	ATOM	3165	NE	ARG	A	410	17.959	66.107	7.001	1.00	0.00	N
	ATOM	3166	CZ	ARG	A	410	17.440	67.255	6.578	1.00	0.00	C
	ATOM	3167	NH1	ARG	A	410	16.255	67.277	5.977	1.00	0.00	N
	ATOM	3168	NH2	ARG	A	410	18.108	68.386	6.768	1.00	0.00	N
	ATOM	3169	N	SER	A	411	15.031	62.230	3.146	1.00	0.00	N

5	ATOM	3170	CA	SER	A	411	14.062	62.737	2.179	1.00	0.00	C
	ATOM	3171	C	SER	A	411	14.587	62.849	0.751	1.00	0.00	C
	ATOM	3172	O	SER	A	411	15.017	61.855	0.160	1.00	0.00	O
	ATOM	3173	CB	SER	A	411	13.512	64.094	2.645	1.00	0.00	C
	ATOM	3174	OG	SER	A	411	14.555	65.012	2.916	1.00	0.00	O
10	ATOM	3175	N	ASP	A	412	14.534	64.055	0.195	1.00	0.00	N
	ATOM	3176	CA	ASP	A	412	15.000	64.292	-1.166	1.00	0.00	C
	ATOM	3177	C	ASP	A	412	16.345	65.016	-1.175	1.00	0.00	C
	ATOM	3178	O	ASP	A	412	16.756	65.551	-2.200	1.00	0.00	O
	ATOM	3179	CB	ASP	A	412	13.966	65.122	-1.941	1.00	0.00	C
15	ATOM	3180	CG	ASP	A	412	13.832	66.548	-1.410	1.00	0.00	C
	ATOM	3181	OD1	ASP	A	412	14.316	66.826	-0.291	1.00	0.00	O
	ATOM	3182	OD2	ASP	A	412	13.228	67.389	-2.114	1.00	0.00	O
	ATOM	3183	N	ASN	A	413	17.022	65.027	-0.030	1.00	0.00	N
	ATOM	3184	CA	ASN	A	413	18.316	65.699	0.088	1.00	0.00	C
20	ATOM	3185	C	ASN	A	413	19.452	64.858	-0.492	1.00	0.00	C
	ATOM	3186	O	ASN	A	413	20.149	64.160	0.248	1.00	0.00	O
	ATOM	3187	CB	ASN	A	413	18.637	66.012	1.553	1.00	0.00	C
	ATOM	3188	CG	ASN	A	413	17.727	67.076	2.156	1.00	0.00	C
	ATOM	3189	OD1	ASN	A	413	17.963	67.536	3.272	1.00	0.00	O
25	ATOM	3190	ND2	ASN	A	413	16.687	67.464	1.429	1.00	0.00	N
	ATOM	3191	N	TYR	A	414	19.631	64.928	-1.809	1.00	0.00	N
	ATOM	3192	CA	TYR	A	414	20.696	64.187	-2.483	1.00	0.00	C
	ATOM	3193	C	TYR	A	414	21.940	65.067	-2.556	1.00	0.00	C
	ATOM	3194	O	TYR	A	414	21.869	66.235	-2.942	1.00	0.00	O
30	ATOM	3195	CB	TYR	A	414	20.264	63.763	-3.891	1.00	0.00	C
	ATOM	3196	CG	TYR	A	414	19.261	62.630	-3.900	1.00	0.00	C
	ATOM	3197	CD1	TYR	A	414	17.909	62.859	-3.628	1.00	0.00	C
	ATOM	3198	CD2	TYR	A	414	19.668	61.319	-4.152	1.00	0.00	C
	ATOM	3199	CE1	TYR	A	414	16.989	61.806	-3.609	1.00	0.00	C
35	ATOM	3200	CE2	TYR	A	414	18.760	60.262	-4.132	1.00	0.00	C
	ATOM	3201	CZ	TYR	A	414	17.423	60.511	-3.861	1.00	0.00	C
	ATOM	3202	OH	TYR	A	414	16.528	59.462	-3.852	1.00	0.00	O
	ATOM	3203	N	TRP	A	415	23.078	64.488	-2.190	1.00	0.00	N
	ATOM	3204	CA	TRP	A	415	24.343	65.211	-2.153	1.00	0.00	C
40	ATOM	3205	C	TRP	A	415	25.086	65.255	-3.482	1.00	0.00	C
	ATOM	3206	O	TRP	A	415	26.225	64.807	-3.568	1.00	0.00	O
	ATOM	3207	CB	TRP	A	415	25.251	64.586	-1.092	1.00	0.00	C
	ATOM	3208	CG	TRP	A	415	24.680	64.608	0.294	1.00	0.00	C
	ATOM	3209	CD1	TRP	A	415	23.384	64.351	0.658	1.00	0.00	C
45	ATOM	3210	CD2	TRP	A	415	25.394	64.860	1.507	1.00	0.00	C
	ATOM	3211	NE1	TRP	A	415	23.251	64.428	2.023	1.00	0.00	N
	ATOM	3212	CE2	TRP	A	415	24.470	64.738	2.570	1.00	0.00	C
	ATOM	3213	CE3	TRP	A	415	26.729	65.175	1.802	1.00	0.00	C
	ATOM	3214	CZ2	TRP	A	415	24.837	64.920	3.907	1.00	0.00	C
50	ATOM	3215	CZ3	TRP	A	415	27.095	65.355	3.128	1.00	0.00	C
	ATOM	3216	CH2	TRP	A	415	26.150	65.226	4.167	1.00	0.00	C
	ATOM	3217	N	SER	A	416	24.452	65.796	-4.516	1.00	0.00	N
	ATOM	3218	CA	SER	A	416	25.100	65.881	-5.814	1.00	0.00	C
	ATOM	3219	C	SER	A	416	25.676	67.274	-6.048	1.00	0.00	C
55	ATOM	3220	O	SER	A	416	26.310	67.528	-7.065	1.00	0.00	O
	ATOM	3221	CB	SER	A	416	24.115	65.510	-6.931	1.00	0.00	C
	ATOM	3222	OG	SER	A	416	22.842	66.097	-6.719	1.00	0.00	O
	ATOM	3223	N	GLY	A	417	25.465	68.171	-5.089	1.00	0.00	N
	ATOM	3224	CA	GLY	A	417	25.979	69.524	-5.223	1.00	0.00	C
60	ATOM	3225	C	GLY	A	417	27.495	69.591	-5.153	1.00	0.00	C
	ATOM	3226	O	GLY	A	417	28.126	70.313	-5.928	1.00	0.00	O
	ATOM	3227	N	TYR	A	418	28.084	68.821	-4.241	1.00	0.00	N
	ATOM	3228	CA	TYR	A	418	29.534	68.815	-4.057	1.00	0.00	C
	ATOM	3229	C	TYR	A	418	30.308	68.208	-5.234	1.00	0.00	C
	ATOM	3230	O	TYR	A	418	31.539	68.209	-5.250	1.00	0.00	O

5	ATOM	3231	CB	TYR	A	418	29.894	68.109	-2.743	1.00	0.00	C
	ATOM	3232	CG	TYR	A	418	30.042	66.601	-2.814	1.00	0.00	C
	ATOM	3233	CD1	TYR	A	418	31.295	66.014	-2.998	1.00	0.00	C
	ATOM	3234	CD2	TYR	A	418	28.941	65.760	-2.636	1.00	0.00	C
	ATOM	3235	CE1	TYR	A	418	31.452	64.622	-2.993	1.00	0.00	C
	ATOM	3236	CE2	TYR	A	418	29.087	64.363	-2.631	1.00	0.00	C
	ATOM	3237	CZ	TYR	A	418	30.346	63.808	-2.807	1.00	0.00	C
10	ATOM	3238	OH	TYR	A	418	30.509	62.440	-2.778	1.00	0.00	O
	ATOM	3239	N	TYR	A	419	29.588	67.682	-6.218	1.00	0.00	N
	ATOM	3240	CA	TYR	A	419	30.247	67.143	-7.400	1.00	0.00	C
	ATOM	3241	C	TYR	A	419	30.767	68.352	-8.190	1.00	0.00	C
15	ATOM	3242	O	TYR	A	419	31.607	68.207	-9.082	1.00	0.00	O
	ATOM	3243	CB	TYR	A	419	29.255	66.377	-8.286	1.00	0.00	C
	ATOM	3244	CG	TYR	A	419	28.627	65.145	-7.665	1.00	0.00	C
	ATOM	3245	CD1	TYR	A	419	27.472	64.589	-8.213	1.00	0.00	C
	ATOM	3246	CD2	TYR	A	419	29.197	64.518	-6.557	1.00	0.00	C
20	ATOM	3247	CE1	TYR	A	419	26.900	63.439	-7.677	1.00	0.00	C
	ATOM	3248	CE2	TYR	A	419	28.633	63.362	-6.012	1.00	0.00	C
	ATOM	3249	CZ	TYR	A	419	27.485	62.829	-6.580	1.00	0.00	C
	ATOM	3250	OH	TYR	A	419	26.927	61.678	-6.064	1.00	0.00	O
	ATOM	3251	N	THR	A	420	30.279	69.544	-7.840	1.00	0.00	N
25	ATOM	3252	CA	THR	A	420	30.661	70.770	-8.546	1.00	0.00	C
	ATOM	3253	C	THR	A	420	31.221	71.919	-7.697	1.00	0.00	C
	ATOM	3254	O	THR	A	420	32.026	72.712	-8.187	1.00	0.00	O
	ATOM	3255	CB	THR	A	420	29.455	71.310	-9.354	1.00	0.00	C
	ATOM	3256	OG1	THR	A	420	28.971	70.281	-10.227	1.00	0.00	O
30	ATOM	3257	CG2	THR	A	420	29.854	72.529	-10.190	1.00	0.00	C
	ATOM	3258	N	SER	A	421	30.800	72.008	-6.436	1.00	0.00	N
	ATOM	3259	CA	SER	A	421	31.242	73.076	-5.536	1.00	0.00	C
	ATOM	3260	C	SER	A	421	32.735	73.389	-5.606	1.00	0.00	C
	ATOM	3261	O	SER	A	421	33.572	72.482	-5.614	1.00	0.00	O
35	ATOM	3262	CB	SER	A	421	30.857	72.735	-4.094	1.00	0.00	C
	ATOM	3263	OG	SER	A	421	29.453	72.577	-3.981	1.00	0.00	O
	ATOM	3264	N	ARG	A	422	33.053	74.684	-5.635	1.00	0.00	N
	ATOM	3265	CA	ARG	A	422	34.435	75.157	-5.717	1.00	0.00	C
	ATOM	3266	C	ARG	A	422	35.159	74.483	-6.885	1.00	0.00	C
40	ATOM	3267	O	ARG	A	422	36.171	73.796	-6.706	1.00	0.00	O
	ATOM	3268	CB	ARG	A	422	35.165	74.882	-4.399	1.00	0.00	C
	ATOM	3269	CG	ARG	A	422	34.962	75.955	-3.314	1.00	0.00	C
	ATOM	3270	CD	ARG	A	422	33.503	76.181	-2.910	1.00	0.00	C
	ATOM	3271	NE	ARG	A	422	33.428	77.149	-1.812	1.00	0.00	N
45	ATOM	3272	CZ	ARG	A	422	33.509	76.833	-0.522	1.00	0.00	C
	ATOM	3273	NH1	ARG	A	422	33.643	75.570	-0.148	1.00	0.00	N
	ATOM	3274	NH2	ARG	A	422	33.518	77.790	0.400	1.00	0.00	N
	ATOM	3275	N	PRO	A	423	34.657	74.698	-8.111	1.00	0.00	N
	ATOM	3276	CA	PRO	A	423	35.246	74.107	-9.316	1.00	0.00	C
50	ATOM	3277	C	PRO	A	423	36.676	74.537	-9.638	1.00	0.00	C
	ATOM	3278	O	PRO	A	423	37.406	73.810	-10.309	1.00	0.00	O
	ATOM	3279	CB	PRO	A	423	34.249	74.490	-10.409	1.00	0.00	C
	ATOM	3280	CG	PRO	A	423	33.751	75.827	-9.945	1.00	0.00	C
	ATOM	3281	CD	PRO	A	423	33.540	75.596	-8.457	1.00	0.00	C
55	ATOM	3282	N	TYR	A	424	37.077	75.717	-9.175	1.00	0.00	N
	ATOM	3283	CA	TYR	A	424	38.434	76.193	-9.433	1.00	0.00	C
	ATOM	3284	C	TYR	A	424	39.447	75.199	-8.863	1.00	0.00	C
	ATOM	3285	O	TYR	A	424	40.399	74.793	-9.536	1.00	0.00	O
	ATOM	3286	CB	TYR	A	424	38.654	77.556	-8.770	1.00	0.00	C
60	ATOM	3287	CG	TYR	A	424	40.023	78.142	-9.032	1.00	0.00	C
	ATOM	3288	CD1	TYR	A	424	40.264	78.904	-10.171	1.00	0.00	C
	ATOM	3289	CD2	TYR	A	424	41.082	77.922	-8.146	1.00	0.00	C
	ATOM	3290	CE1	TYR	A	424	41.522	79.439	-10.425	1.00	0.00	C
	ATOM	3291	CE2	TYR	A	424	42.351	78.452	-8.393	1.00	0.00	C

5	ATOM	3292	CZ	TYR	A	424	42.561	79.212	-9.536	1.00	0.00	C
	ATOM	3293	OH	TYR	A	424	43.801	79.754	-9.797	1.00	0.00	O
	ATOM	3294	N	HIS	A	425	39.223	74.798	-7.617	1.00	0.00	N
	ATOM	3295	CA	HIS	A	425	40.121	73.876	-6.933	1.00	0.00	C
	ATOM	3296	C	HIS	A	425	39.983	72.441	-7.433	1.00	0.00	C
10	ATOM	3297	O	HIS	A	425	40.940	71.665	-7.375	1.00	0.00	O
	ATOM	3298	CB	HIS	A	425	39.872	73.988	-5.432	1.00	0.00	C
	ATOM	3299	CG	HIS	A	425	39.848	75.407	-4.958	1.00	0.00	C
	ATOM	3300	ND1	HIS	A	425	40.997	76.127	-4.708	1.00	0.00	N
	ATOM	3301	CD2	HIS	A	425	38.821	76.281	-4.824	1.00	0.00	C
15	ATOM	3302	CE1	HIS	A	425	40.681	77.382	-4.446	1.00	0.00	C
	ATOM	3303	NE2	HIS	A	425	39.367	77.503	-4.511	1.00	0.00	N
	ATOM	3304	N	LYS	A	426	38.799	72.091	-7.925	1.00	0.00	N
	ATOM	3305	CA	LYS	A	426	38.581	70.755	-8.480	1.00	0.00	C
	ATOM	3306	C	LYS	A	426	39.470	70.629	-9.719	1.00	0.00	C
20	ATOM	3307	O	LYS	A	426	40.072	69.577	-9.968	1.00	0.00	O
	ATOM	3308	CB	LYS	A	426	37.107	70.563	-8.870	1.00	0.00	C
	ATOM	3309	CG	LYS	A	426	36.195	70.152	-7.716	1.00	0.00	C
	ATOM	3310	CD	LYS	A	426	34.725	70.105	-8.148	1.00	0.00	C
	ATOM	3311	CE	LYS	A	426	33.869	69.286	-7.178	1.00	0.00	C
25	ATOM	3312	NZ	LYS	A	426	33.884	69.803	-5.776	1.00	0.00	N
	ATOM	3313	N	ARG	A	427	39.551	71.709	-10.494	1.00	0.00	N
	ATOM	3314	CA	ARG	A	427	40.382	71.732	-11.694	1.00	0.00	C
	ATOM	3315	C	ARG	A	427	41.850	71.769	-11.269	1.00	0.00	C
	ATOM	3316	O	ARG	A	427	42.695	71.093	-11.852	1.00	0.00	O
30	ATOM	3317	CB	ARG	A	427	40.024	72.955	-12.555	1.00	0.00	C
	ATOM	3318	CG	ARG	A	427	41.003	73.283	-13.676	1.00	0.00	C
	ATOM	3319	CD	ARG	A	427	41.277	72.113	-14.624	1.00	0.00	C
	ATOM	3320	NE	ARG	A	427	42.272	72.510	-15.617	1.00	0.00	N
	ATOM	3321	CZ	ARG	A	427	43.045	71.672	-16.298	1.00	0.00	C
35	ATOM	3322	NH1	ARG	A	427	42.951	70.361	-16.110	1.00	0.00	N
	ATOM	3323	NH2	ARG	A	427	43.936	72.155	-17.155	1.00	0.00	N
	ATOM	3324	N	MET	A	428	42.145	72.544	-10.233	1.00	0.00	N
	ATOM	3325	CA	MET	A	428	43.514	72.641	-9.739	1.00	0.00	C
	ATOM	3326	C	MET	A	428	44.018	71.255	-9.321	1.00	0.00	C
40	ATOM	3327	O	MET	A	428	45.196	70.928	-9.507	1.00	0.00	O
	ATOM	3328	CB	MET	A	428	43.570	73.610	-8.555	1.00	0.00	C
	ATOM	3329	CG	MET	A	428	44.976	73.929	-8.088	1.00	0.00	C
	ATOM	3330	SD	MET	A	428	45.002	75.301	-6.918	1.00	0.00	S
	ATOM	3331	CE	MET	A	428	46.758	75.634	-6.852	1.00	0.00	C
45	ATOM	3332	N	ASP	A	429	43.117	70.438	-8.775	1.00	0.00	N
	ATOM	3333	CA	ASP	A	429	43.473	69.085	-8.348	1.00	0.00	C
	ATOM	3334	C	ASP	A	429	44.061	68.268	-9.492	1.00	0.00	C
	ATOM	3335	O	ASP	A	429	45.083	67.600	-9.328	1.00	0.00	O
	ATOM	3336	CB	ASP	A	429	42.247	68.356	-7.785	1.00	0.00	C
50	ATOM	3337	CG	ASP	A	429	42.531	66.893	-7.463	1.00	0.00	C
	ATOM	3338	OD1	ASP	A	429	42.221	66.022	-8.309	1.00	0.00	O
	ATOM	3339	OD2	ASP	A	429	43.071	66.617	-6.370	1.00	0.00	O
	ATOM	3340	N	ARG	A	430	43.415	68.328	-10.653	1.00	0.00	N
	ATOM	3341	CA	ARG	A	430	43.874	67.574	-11.817	1.00	0.00	C
55	ATOM	3342	C	ARG	A	430	45.199	68.087	-12.368	1.00	0.00	C
	ATOM	3343	O	ARG	A	430	46.017	67.312	-12.877	1.00	0.00	O
	ATOM	3344	CB	ARG	A	430	42.803	67.606	-12.907	1.00	0.00	C
	ATOM	3345	CG	ARG	A	430	41.512	66.914	-12.504	1.00	0.00	C
	ATOM	3346	CD	ARG	A	430	41.748	65.447	-12.150	1.00	0.00	C
60	ATOM	3347	NE	ARG	A	430	40.503	64.684	-12.126	1.00	0.00	N
	ATOM	3348	CZ	ARG	A	430	39.819	64.378	-11.027	1.00	0.00	C
	ATOM	3349	NH1	ARG	A	430	40.252	64.760	-9.832	1.00	0.00	N
	ATOM	3350	NH2	ARG	A	430	38.683	63.694	-11.126	1.00	0.00	N
	ATOM	3351	N	VAL	A	431	45.407	69.395	-12.278	1.00	0.00	N
	ATOM	3352	CA	VAL	A	431	46.651	69.989	-12.748	1.00	0.00	C

5	ATOM	3353	C	VAL	A	431	47.789	69.514	-11.840	1.00	0.00	C
	ATOM	3354	O	VAL	A	431	48.817	69.038	-12.315	1.00	0.00	O
	ATOM	3355	CB	VAL	A	431	46.579	71.536	-12.721	1.00	0.00	C
	ATOM	3356	CG1	VAL	A	431	47.951	72.135	-13.040	1.00	0.00	C
	ATOM	3357	CG2	VAL	A	431	45.550	72.024	-13.735	1.00	0.00	C
10	ATOM	3358	N	LEU	A	432	47.599	69.630	-10.530	1.00	0.00	N
	ATOM	3359	CA	LEU	A	432	48.635	69.205	-9.595	1.00	0.00	C
	ATOM	3360	C	LEU	A	432	48.864	67.703	-9.699	1.00	0.00	C
	ATOM	3361	O	LEU	A	432	49.996	67.234	-9.588	1.00	0.00	O
	ATOM	3362	CB	LEU	A	432	48.258	69.586	-8.160	1.00	0.00	C
15	ATOM	3363	CG	LEU	A	432	49.291	69.259	-7.078	1.00	0.00	C
	ATOM	3364	CD1	LEU	A	432	50.658	69.838	-7.461	1.00	0.00	C
	ATOM	3365	CD2	LEU	A	432	48.823	69.839	-5.736	1.00	0.00	C
	ATOM	3366	N	MET	A	433	47.792	66.946	-9.918	1.00	0.00	N
	ATOM	3367	CA	MET	A	433	47.919	65.497	-10.062	1.00	0.00	C
20	ATOM	3368	C	MET	A	433	48.970	65.194	-11.120	1.00	0.00	C
	ATOM	3369	O	MET	A	433	49.852	64.351	-10.920	1.00	0.00	O
	ATOM	3370	CB	MET	A	433	46.594	64.873	-10.502	1.00	0.00	C
	ATOM	3371	CG	MET	A	433	46.728	63.412	-10.918	1.00	0.00	C
	ATOM	3372	SD	MET	A	433	45.192	62.708	-11.557	1.00	0.00	S
25	ATOM	3373	CE	MET	A	433	45.225	63.322	-13.248	1.00	0.00	C
	ATOM	3374	N	HIS	A	434	48.869	65.886	-12.250	1.00	0.00	N
	ATOM	3375	CA	HIS	A	434	49.806	65.680	-13.346	1.00	0.00	C
	ATOM	3376	C	HIS	A	434	51.207	66.194	-13.049	1.00	0.00	C
	ATOM	3377	O	HIS	A	434	52.196	65.539	-13.386	1.00	0.00	O
30	ATOM	3378	CB	HIS	A	434	49.293	66.333	-14.631	1.00	0.00	C
	ATOM	3379	CG	HIS	A	434	50.274	66.259	-15.755	1.00	0.00	C
	ATOM	3380	ND1	HIS	A	434	51.015	67.345	-16.167	1.00	0.00	N
	ATOM	3381	CD2	HIS	A	434	50.712	65.205	-16.484	1.00	0.00	C
	ATOM	3382	CE1	HIS	A	434	51.869	66.961	-17.099	1.00	0.00	C
35	ATOM	3383	NE2	HIS	A	434	51.707	65.668	-17.310	1.00	0.00	N
	ATOM	3384	N	TYR	A	435	51.294	67.372	-12.435	1.00	0.00	N
	ATOM	3385	CA	TYR	A	435	52.593	67.943	-12.100	1.00	0.00	C
	ATOM	3386	C	TYR	A	435	53.359	67.019	-11.162	1.00	0.00	C
	ATOM	3387	O	TYR	A	435	54.573	66.871	-11.292	1.00	0.00	O
40	ATOM	3388	CB	TYR	A	435	52.432	69.315	-11.435	1.00	0.00	C
	ATOM	3389	CG	TYR	A	435	52.316	70.482	-12.393	1.00	0.00	C
	ATOM	3390	CD1	TYR	A	435	51.335	70.513	-13.384	1.00	0.00	C
	ATOM	3391	CD2	TYR	A	435	53.160	71.587	-12.267	1.00	0.00	C
	ATOM	3392	CE1	TYR	A	435	51.193	71.624	-14.226	1.00	0.00	C
45	ATOM	3393	CE2	TYR	A	435	53.028	72.697	-13.097	1.00	0.00	C
	ATOM	3394	CZ	TYR	A	435	52.043	72.711	-14.072	1.00	0.00	C
	ATOM	3395	OH	TYR	A	435	51.898	73.830	-14.866	1.00	0.00	O
	ATOM	3396	N	VAL	A	436	52.656	66.400	-10.215	1.00	0.00	N
	ATOM	3397	CA	VAL	A	436	53.317	65.490	-9.282	1.00	0.00	C
50	ATOM	3398	C	VAL	A	436	53.886	64.293	-10.038	1.00	0.00	C
	ATOM	3399	O	VAL	A	436	55.042	63.912	-9.841	1.00	0.00	O
	ATOM	3400	CB	VAL	A	436	52.345	65.011	-8.173	1.00	0.00	C
	ATOM	3401	CG1	VAL	A	436	52.927	63.816	-7.437	1.00	0.00	C
	ATOM	3402	CG2	VAL	A	436	52.098	66.149	-7.186	1.00	0.00	C
55	ATOM	3403	N	ARG	A	437	53.079	63.708	-10.916	1.00	0.00	N
	ATOM	3404	CA	ARG	A	437	53.540	62.566	-11.696	1.00	0.00	C
	ATOM	3405	C	ARG	A	437	54.754	62.934	-12.546	1.00	0.00	C
	ATOM	3406	O	ARG	A	437	55.739	62.194	-12.594	1.00	0.00	O
	ATOM	3407	CB	ARG	A	437	52.420	62.048	-12.606	1.00	0.00	C
60	ATOM	3408	CG	ARG	A	437	52.918	61.115	-13.703	1.00	0.00	C
	ATOM	3409	CD	ARG	A	437	51.782	60.539	-14.543	1.00	0.00	C
	ATOM	3410	NE	ARG	A	437	52.290	59.871	-15.741	1.00	0.00	N
	ATOM	3411	CZ	ARG	A	437	51.563	59.066	-16.513	1.00	0.00	C
	ATOM	3412	NH1	ARG	A	437	50.293	58.819	-16.213	1.00	0.00	N
	ATOM	3413	NH2	ARG	A	437	52.099	58.518	-17.595	1.00	0.00	N

5	ATOM	3414	N	ALA	A	438	54.681	64.077	-13.221	1.00	0.00	N
	ATOM	3415	CA	ALA	A	438	55.772	64.522	-14.086	1.00	0.00	C
	ATOM	3416	C	ALA	A	438	57.053	64.806	-13.308	1.00	0.00	C
	ATOM	3417	O	ALA	A	438	58.149	64.467	-13.760	1.00	0.00	O
	ATOM	3418	CB	ALA	A	438	55.345	65.762	-14.878	1.00	0.00	C
10	ATOM	3419	N	ALA	A	439	56.914	65.418	-12.136	1.00	0.00	N
	ATOM	3420	CA	ALA	A	439	58.074	65.737	-11.311	1.00	0.00	C
	ATOM	3421	C	ALA	A	439	58.733	64.462	-10.786	1.00	0.00	C
	ATOM	3422	O	ALA	A	439	59.954	64.318	-10.837	1.00	0.00	O
	ATOM	3423	CB	ALA	A	439	57.660	66.644	-10.143	1.00	0.00	C
15	ATOM	3424	N	GLU	A	440	57.925	63.538	-10.274	1.00	0.00	N
	ATOM	3425	CA	GLU	A	440	58.468	62.282	-9.761	1.00	0.00	C
	ATOM	3426	C	GLU	A	440	59.121	61.460	-10.875	1.00	0.00	C
	ATOM	3427	O	GLU	A	440	60.177	60.855	-10.676	1.00	0.00	O
	ATOM	3428	CB	GLU	A	440	57.366	61.449	-9.094	1.00	0.00	C
20	ATOM	3429	CG	GLU	A	440	56.798	62.084	-7.836	1.00	0.00	C
	ATOM	3430	CD	GLU	A	440	56.139	61.070	-6.918	1.00	0.00	C
	ATOM	3431	OE1	GLU	A	440	55.013	60.619	-7.215	1.00	0.00	O
	ATOM	3432	OE2	GLU	A	440	56.765	60.712	-5.903	1.00	0.00	O
	ATOM	3433	N	MET	A	441	58.497	61.433	-12.048	1.00	0.00	N
25	ATOM	3434	CA	MET	A	441	59.050	60.662	-13.160	1.00	0.00	C
	ATOM	3435	C	MET	A	441	60.327	61.279	-13.723	1.00	0.00	C
	ATOM	3436	O	MET	A	441	61.326	60.583	-13.915	1.00	0.00	O
	ATOM	3437	CB	MET	A	441	58.013	60.508	-14.275	1.00	0.00	C
	ATOM	3438	CG	MET	A	441	58.521	59.759	-15.507	1.00	0.00	C
30	ATOM	3439	SD	MET	A	441	57.249	59.561	-16.783	1.00	0.00	S
	ATOM	3440	CE	MET	A	441	56.178	58.340	-16.009	1.00	0.00	C
	ATOM	3441	N	LEU	A	442	60.305	62.583	-13.984	1.00	0.00	N
	ATOM	3442	CA	LEU	A	442	61.483	63.250	-14.531	1.00	0.00	C
	ATOM	3443	C	LEU	A	442	62.698	63.167	-13.620	1.00	0.00	C
35	ATOM	3444	O	LEU	A	442	63.827	63.032	-14.095	1.00	0.00	O
	ATOM	3445	CB	LEU	A	442	61.173	64.718	-14.844	1.00	0.00	C
	ATOM	3446	CG	LEU	A	442	60.550	64.989	-16.219	1.00	0.00	C
	ATOM	3447	CD1	LEU	A	442	59.972	66.398	-16.256	1.00	0.00	C
	ATOM	3448	CD2	LEU	A	442	61.598	64.811	-17.305	1.00	0.00	C
40	ATOM	3449	N	SER	A	443	62.477	63.228	-12.310	1.00	0.00	N
	ATOM	3450	CA	SER	A	443	63.594	63.173	-11.377	1.00	0.00	C
	ATOM	3451	C	SER	A	443	64.002	61.750	-10.998	1.00	0.00	C
	ATOM	3452	O	SER	A	443	65.058	61.546	-10.393	1.00	0.00	O
	ATOM	3453	CB	SER	A	443	63.263	63.971	-10.110	1.00	0.00	C
45	ATOM	3454	OG	SER	A	443	62.172	63.400	-9.410	1.00	0.00	O
	ATOM	3455	N	ALA	A	444	63.178	60.770	-11.364	1.00	0.00	N
	ATOM	3456	CA	ALA	A	444	63.458	59.370	-11.041	1.00	0.00	C
	ATOM	3457	C	ALA	A	444	64.616	58.781	-11.845	1.00	0.00	C
	ATOM	3458	O	ALA	A	444	65.262	57.832	-11.403	1.00	0.00	O
50	ATOM	3459	CB	ALA	A	444	62.203	58.522	-11.254	1.00	0.00	C
	ATOM	3460	N	TRP	A	445	64.878	59.345	-13.020	1.00	0.00	N
	ATOM	3461	CA	TRP	A	445	65.947	58.844	-13.881	1.00	0.00	C
	ATOM	3462	C	TRP	A	445	67.332	58.915	-13.252	1.00	0.00	C
	ATOM	3463	O	TRP	A	445	68.198	58.093	-13.560	1.00	0.00	O
55	ATOM	3464	CB	TRP	A	445	65.943	59.593	-15.218	1.00	0.00	C
	ATOM	3465	CG	TRP	A	445	64.664	59.428	-15.968	1.00	0.00	C
	ATOM	3466	CD1	TRP	A	445	63.670	60.354	-16.109	1.00	0.00	C
	ATOM	3467	CD2	TRP	A	445	64.213	58.248	-16.644	1.00	0.00	C
	ATOM	3468	NE1	TRP	A	445	62.628	59.823	-16.829	1.00	0.00	N
60	ATOM	3469	CE2	TRP	A	445	62.934	58.532	-17.170	1.00	0.00	C
	ATOM	3470	CE3	TRP	A	445	64.766	56.976	-16.856	1.00	0.00	C
	ATOM	3471	CZ2	TRP	A	445	62.193	57.588	-17.898	1.00	0.00	C
	ATOM	3472	CZ3	TRP	A	445	64.030	56.036	-17.578	1.00	0.00	C
	ATOM	3473	CH2	TRP	A	445	62.755	56.351	-18.091	1.00	0.00	C
	ATOM	3474	N	HIS	A	446	67.545	59.895	-12.379	1.00	0.00	N

5	ATOM	3475	CA	HIS	A	446	68.834	60.044	-11.714	1.00	0.00	C
	ATOM	3476	C	HIS	A	446	68.713	59.940	-10.206	1.00	0.00	C
	ATOM	3477	O	HIS	A	446	67.626	60.069	-9.640	1.00	0.00	O
	ATOM	3478	CB	HIS	A	446	69.467	61.411	-11.997	1.00	0.00	C
	ATOM	3479	CG	HIS	A	446	69.879	61.623	-13.418	1.00	0.00	C
10	ATOM	3480	ND1	HIS	A	446	69.050	62.200	-14.354	1.00	0.00	N
	ATOM	3481	CD2	HIS	A	446	71.048	61.370	-14.053	1.00	0.00	C
	ATOM	3482	CE1	HIS	A	446	69.691	62.297	-15.505	1.00	0.00	C
	ATOM	3483	NE2	HIS	A	446	70.905	61.801	-15.350	1.00	0.00	N
	ATOM	3484	N	SER	A	447	69.856	59.712	-9.568	1.00	0.00	N
15	ATOM	3485	CA	SER	A	447	69.944	59.672	-8.122	1.00	0.00	C
	ATOM	3486	C	SER	A	447	70.427	61.099	-7.855	1.00	0.00	C
	ATOM	3487	O	SER	A	447	71.319	61.587	-8.551	1.00	0.00	O
	ATOM	3488	CB	SER	A	447	70.993	58.649	-7.680	1.00	0.00	C
	ATOM	3489	OG	SER	A	447	71.002	58.509	-6.273	1.00	0.00	O
20	ATOM	3490	N	TRP	A	448	69.834	61.784	-6.883	1.00	0.00	N
	ATOM	3491	CA	TRP	A	448	70.231	63.161	-6.617	1.00	0.00	C
	ATOM	3492	C	TRP	A	448	70.916	63.388	-5.281	1.00	0.00	C
	ATOM	3493	O	TRP	A	448	70.587	62.751	-4.284	1.00	0.00	O
	ATOM	3494	CB	TRP	A	448	69.017	64.090	-6.706	1.00	0.00	C
25	ATOM	3495	CG	TRP	A	448	68.374	64.123	-8.059	1.00	0.00	C
	ATOM	3496	CD1	TRP	A	448	67.544	63.184	-8.594	1.00	0.00	C
	ATOM	3497	CD2	TRP	A	448	68.520	65.144	-9.052	1.00	0.00	C
	ATOM	3498	NE1	TRP	A	448	67.163	63.554	-9.860	1.00	0.00	N
	ATOM	3499	CE2	TRP	A	448	67.747	64.754	-10.167	1.00	0.00	C
30	ATOM	3500	CE3	TRP	A	448	69.232	66.353	-9.108	1.00	0.00	C
	ATOM	3501	CZ2	TRP	A	448	67.664	65.528	-11.327	1.00	0.00	C
	ATOM	3502	CZ3	TRP	A	448	69.149	67.124	-10.262	1.00	0.00	C
	ATOM	3503	CH2	TRP	A	448	68.369	66.706	-11.358	1.00	0.00	C
	ATOM	3504	N	ASP	A	449	71.873	64.312	-5.277	1.00	0.00	N
35	ATOM	3505	CA	ASP	A	449	72.598	64.661	-4.062	1.00	0.00	C
	ATOM	3506	C	ASP	A	449	71.600	65.348	-3.135	1.00	0.00	C
	ATOM	3507	O	ASP	A	449	70.718	66.072	-3.594	1.00	0.00	O
	ATOM	3508	CB	ASP	A	449	73.754	65.610	-4.393	1.00	0.00	C
	ATOM	3509	CG	ASP	A	449	74.627	65.915	-3.187	1.00	0.00	C
40	ATOM	3510	OD1	ASP	A	449	74.188	66.678	-2.297	1.00	0.00	O
	ATOM	3511	OD2	ASP	A	449	75.756	65.381	-3.128	1.00	0.00	O
	ATOM	3512	N	GLY	A	450	71.737	65.113	-1.835	1.00	0.00	N
	ATOM	3513	CA	GLY	A	450	70.828	65.713	-0.876	1.00	0.00	C
	ATOM	3514	C	GLY	A	450	70.704	67.221	-0.991	1.00	0.00	C
45	ATOM	3515	O	GLY	A	450	69.661	67.788	-0.664	1.00	0.00	O
	ATOM	3516	N	MET	A	451	71.764	67.875	-1.454	1.00	0.00	N
	ATOM	3517	CA	MET	A	451	71.752	69.327	-1.593	1.00	0.00	C
	ATOM	3518	C	MET	A	451	70.770	69.822	-2.650	1.00	0.00	C
	ATOM	3519	O	MET	A	451	70.391	70.992	-2.647	1.00	0.00	O
50	ATOM	3520	CB	MET	A	451	73.153	69.842	-1.937	1.00	0.00	C
	ATOM	3521	CG	MET	A	451	74.196	69.602	-0.862	1.00	0.00	C
	ATOM	3522	SD	MET	A	451	75.755	70.439	-1.246	1.00	0.00	S
	ATOM	3523	CE	MET	A	451	76.604	69.173	-2.220	1.00	0.00	C
	ATOM	3524	N	ALA	A	452	70.367	68.937	-3.557	1.00	0.00	N
55	ATOM	3525	CA	ALA	A	452	69.436	69.308	-4.618	1.00	0.00	C
	ATOM	3526	C	ALA	A	452	68.020	69.480	-4.080	1.00	0.00	C
	ATOM	3527	O	ALA	A	452	67.151	70.027	-4.762	1.00	0.00	O
	ATOM	3528	CB	ALA	A	452	69.451	68.253	-5.719	1.00	0.00	C
	ATOM	3529	N	ARG	A	453	67.797	69.002	-2.859	1.00	0.00	N
60	ATOM	3530	CA	ARG	A	453	66.490	69.099	-2.211	1.00	0.00	C
	ATOM	3531	C	ARG	A	453	65.363	68.513	-3.062	1.00	0.00	C
	ATOM	3532	O	ARG	A	453	64.230	68.994	-3.023	1.00	0.00	O
	ATOM	3533	CB	ARG	A	453	66.186	70.564	-1.878	1.00	0.00	C
	ATOM	3534	CG	ARG	A	453	67.256	71.230	-1.023	1.00	0.00	C
	ATOM	3535	CD	ARG	A	453	66.948	72.701	-0.782	1.00	0.00	C

5	ATOM	3536	NE	ARG	A	453	65.729	72.891	-0.001	1.00	0.00	N
	ATOM	3537	CZ	ARG	A	453	65.185	74.075	0.262	1.00	0.00	C
	ATOM	3538	NH1	ARG	A	453	65.752	75.186	-0.196	1.00	0.00	N
	ATOM	3539	NH2	ARG	A	453	64.074	74.150	0.985	1.00	0.00	N
	ATOM	3540	N	ILE	A	454	65.674	67.471	-3.825	1.00	0.00	N
10	ATOM	3541	CA	ILE	A	454	64.682	66.828	-4.679	1.00	0.00	C
	ATOM	3542	C	ILE	A	454	63.639	66.076	-3.851	1.00	0.00	C
	ATOM	3543	O	ILE	A	454	62.439	66.311	-3.999	1.00	0.00	O
	ATOM	3544	CB	ILE	A	454	65.351	65.845	-5.665	1.00	0.00	C
	ATOM	3545	CG1	ILE	A	454	66.318	66.606	-6.583	1.00	0.00	C
15	ATOM	3546	CG2	ILE	A	454	64.288	65.109	-6.477	1.00	0.00	C
	ATOM	3547	CD1	ILE	A	454	65.670	67.696	-7.424	1.00	0.00	C
	ATOM	3548	N	GLU	A	455	64.095	65.176	-2.983	1.00	0.00	N
	ATOM	3549	CA	GLU	A	455	63.178	64.407	-2.143	1.00	0.00	C
	ATOM	3550	C	GLU	A	455	62.324	65.346	-1.298	1.00	0.00	C
20	ATOM	3551	O	GLU	A	455	61.130	65.114	-1.102	1.00	0.00	O
	ATOM	3552	CB	GLU	A	455	63.945	63.453	-1.215	1.00	0.00	C
	ATOM	3553	CG	GLU	A	455	64.533	62.220	-1.890	1.00	0.00	C
	ATOM	3554	CD	GLU	A	455	65.881	62.476	-2.542	1.00	0.00	C
	ATOM	3555	OE1	GLU	A	455	66.349	63.636	-2.525	1.00	0.00	O
25	ATOM	3556	OE2	GLU	A	455	66.472	61.509	-3.072	1.00	0.00	O
	ATOM	3557	N	GLU	A	456	62.948	66.408	-0.799	1.00	0.00	N
	ATOM	3558	CA	GLU	A	456	62.257	67.390	0.026	1.00	0.00	C
	ATOM	3559	C	GLU	A	456	61.070	68.007	-0.712	1.00	0.00	C
	ATOM	3560	O	GLU	A	456	59.938	67.988	-0.222	1.00	0.00	O
30	ATOM	3561	CB	GLU	A	456	63.227	68.499	0.435	1.00	0.00	C
	ATOM	3562	CG	GLU	A	456	62.661	69.474	1.449	1.00	0.00	C
	ATOM	3563	CD	GLU	A	456	63.537	70.699	1.626	1.00	0.00	C
	ATOM	3564	OE1	GLU	A	456	64.769	70.575	1.481	1.00	0.00	O
	ATOM	3565	OE2	GLU	A	456	62.995	71.785	1.922	1.00	0.00	O
35	ATOM	3566	N	ARG	A	457	61.333	68.560	-1.892	1.00	0.00	N
	ATOM	3567	CA	ARG	A	457	60.282	69.192	-2.685	1.00	0.00	C
	ATOM	3568	C	ARG	A	457	59.187	68.212	-3.109	1.00	0.00	C
	ATOM	3569	O	ARG	A	457	58.004	68.555	-3.101	1.00	0.00	O
	ATOM	3570	CB	ARG	A	457	60.895	69.875	-3.917	1.00	0.00	C
40	ATOM	3571	CG	ARG	A	457	61.309	71.336	-3.699	1.00	0.00	C
	ATOM	3572	CD	ARG	A	457	62.238	71.517	-2.498	1.00	0.00	C
	ATOM	3573	NE	ARG	A	457	62.497	72.929	-2.200	1.00	0.00	N
	ATOM	3574	CZ	ARG	A	457	63.347	73.705	-2.870	1.00	0.00	C
	ATOM	3575	NH1	ARG	A	457	64.041	73.217	-3.892	1.00	0.00	N
45	ATOM	3576	NH2	ARG	A	457	63.504	74.977	-2.517	1.00	0.00	N
	ATOM	3577	N	LEU	A	458	59.573	66.992	-3.471	1.00	0.00	N
	ATOM	3578	CA	LEU	A	458	58.590	65.997	-3.888	1.00	0.00	C
	ATOM	3579	C	LEU	A	458	57.697	65.554	-2.730	1.00	0.00	C
	ATOM	3580	O	LEU	A	458	56.508	65.309	-2.921	1.00	0.00	O
50	ATOM	3581	CB	LEU	A	458	59.284	64.783	-4.509	1.00	0.00	C
	ATOM	3582	CG	LEU	A	458	60.000	65.079	-5.836	1.00	0.00	C
	ATOM	3583	CD1	LEU	A	458	60.686	63.816	-6.345	1.00	0.00	C
	ATOM	3584	CD2	LEU	A	458	58.986	65.597	-6.865	1.00	0.00	C
	ATOM	3585	N	GLU	A	459	58.263	65.452	-1.531	1.00	0.00	N
55	ATOM	3586	CA	GLU	A	459	57.471	65.050	-0.375	1.00	0.00	C
	ATOM	3587	C	GLU	A	459	56.427	66.128	-0.094	1.00	0.00	C
	ATOM	3588	O	GLU	A	459	55.260	65.827	0.163	1.00	0.00	O
	ATOM	3589	CB	GLU	A	459	58.364	64.842	0.855	1.00	0.00	C
	ATOM	3590	CG	GLU	A	459	57.595	64.349	2.085	1.00	0.00	C
60	ATOM	3591	CD	GLU	A	459	58.499	63.761	3.158	1.00	0.00	C
	ATOM	3592	OE1	GLU	A	459	59.213	64.532	3.828	1.00	0.00	O
	ATOM	3593	OE2	GLU	A	459	58.500	62.522	3.323	1.00	0.00	O
	ATOM	3594	N	GLN	A	460	56.846	67.388	-0.153	1.00	0.00	N
	ATOM	3595	CA	GLN	A	460	55.924	68.493	0.079	1.00	0.00	C
	ATOM	3596	C	GLN	A	460	54.787	68.432	-0.949	1.00	0.00	C

5	ATOM	3597	O	GLN	A	460	53.612	68.514	-0.598	1.00	0.00	O
	ATOM	3598	CB	GLN	A	460	56.660	69.829	-0.045	1.00	0.00	C
	ATOM	3599	CG	GLN	A	460	55.777	71.040	0.210	1.00	0.00	C
10	ATOM	3600	CD	GLN	A	460	56.444	72.346	-0.167	1.00	0.00	C
	ATOM	3601	OE1	GLN	A	460	55.924	73.423	0.127	1.00	0.00	O
	ATOM	3602	NE2	GLN	A	460	57.592	72.261	-0.830	1.00	0.00	N
15	ATOM	3603	N	ALA	A	461	55.141	68.279	-2.222	1.00	0.00	N
	ATOM	3604	CA	ALA	A	461	54.130	68.220	-3.273	1.00	0.00	C
	ATOM	3605	C	ALA	A	461	53.140	67.071	-3.069	1.00	0.00	C
20	ATOM	3606	O	ALA	A	461	51.929	67.271	-3.161	1.00	0.00	O
	ATOM	3607	CB	ALA	A	461	54.802	68.103	-4.645	1.00	0.00	C
	ATOM	3608	N	ARG	A	462	53.653	65.872	-2.800	1.00	0.00	N
25	ATOM	3609	CA	ARG	A	462	52.793	64.709	-2.589	1.00	0.00	C
	ATOM	3610	C	ARG	A	462	51.856	64.925	-1.402	1.00	0.00	C
	ATOM	3611	O	ARG	A	462	50.674	64.585	-1.453	1.00	0.00	O
30	ATOM	3612	CB	ARG	A	462	53.628	63.444	-2.332	1.00	0.00	C
	ATOM	3613	CG	ARG	A	462	54.381	62.881	-3.541	1.00	0.00	C
	ATOM	3614	CD	ARG	A	462	54.829	61.444	-3.251	1.00	0.00	C
35	ATOM	3615	NE	ARG	A	462	55.740	61.374	-2.109	1.00	0.00	N
	ATOM	3616	CZ	ARG	A	462	57.059	61.524	-2.195	1.00	0.00	C
	ATOM	3617	NH1	ARG	A	462	57.631	61.746	-3.374	1.00	0.00	N
40	ATOM	3618	NH2	ARG	A	462	57.810	61.459	-1.102	1.00	0.00	N
	ATOM	3619	N	ARG	A	463	52.389	65.494	-0.327	1.00	0.00	N
	ATOM	3620	CA	ARG	A	463	51.584	65.717	0.863	1.00	0.00	C
45	ATOM	3621	C	ARG	A	463	50.499	66.784	0.729	1.00	0.00	C
	ATOM	3622	O	ARG	A	463	49.402	66.609	1.255	1.00	0.00	O
	ATOM	3623	CB	ARG	A	463	52.503	66.000	2.054	1.00	0.00	C
50	ATOM	3624	CG	ARG	A	463	53.280	64.748	2.436	1.00	0.00	C
	ATOM	3625	CD	ARG	A	463	54.193	64.919	3.631	1.00	0.00	C
	ATOM	3626	NE	ARG	A	463	54.722	63.619	4.032	1.00	0.00	N
55	ATOM	3627	CZ	ARG	A	463	55.484	63.411	5.100	1.00	0.00	C
	ATOM	3628	NH1	ARG	A	463	55.817	64.426	5.885	1.00	0.00	N
	ATOM	3629	NH2	ARG	A	463	55.900	62.184	5.388	1.00	0.00	N
60	ATOM	3630	N	GLU	A	464	50.780	67.879	0.025	1.00	0.00	N
	ATOM	3631	CA	GLU	A	464	49.760	68.912	-0.139	1.00	0.00	C
	ATOM	3632	C	GLU	A	464	48.655	68.409	-1.067	1.00	0.00	C
65	ATOM	3633	O	GLU	A	464	47.483	68.718	-0.861	1.00	0.00	O
	ATOM	3634	CB	GLU	A	464	50.368	70.203	-0.691	1.00	0.00	C
	ATOM	3635	CG	GLU	A	464	51.515	70.747	0.153	1.00	0.00	C
70	ATOM	3636	CD	GLU	A	464	51.087	71.173	1.552	1.00	0.00	C
	ATOM	3637	OE1	GLU	A	464	50.050	70.691	2.054	1.00	0.00	O
	ATOM	3638	OE2	GLU	A	464	51.804	71.989	2.163	1.00	0.00	O
75	ATOM	3639	N	LEU	A	465	49.022	67.644	-2.092	1.00	0.00	N
	ATOM	3640	CA	LEU	A	465	48.016	67.098	-3.003	1.00	0.00	C
	ATOM	3641	C	LEU	A	465	47.212	66.032	-2.262	1.00	0.00	C
80	ATOM	3642	O	LEU	A	465	45.991	65.956	-2.398	1.00	0.00	O
	ATOM	3643	CB	LEU	A	465	48.669	66.473	-4.244	1.00	0.00	C
	ATOM	3644	CG	LEU	A	465	47.699	65.779	-5.215	1.00	0.00	C
85	ATOM	3645	CD1	LEU	A	465	46.661	66.785	-5.708	1.00	0.00	C
	ATOM	3646	CD2	LEU	A	465	48.464	65.186	-6.393	1.00	0.00	C
	ATOM	3647	N	SER	A	466	47.902	65.214	-1.468	1.00	0.00	N
90	ATOM	3648	CA	SER	A	466	47.234	64.157	-0.712	1.00	0.00	C
	ATOM	3649	C	SER	A	466	46.247	64.759	0.277	1.00	0.00	C
	ATOM	3650	O	SER	A	466	45.140	64.247	0.459	1.00	0.00	O
95	ATOM	3651	CB	SER	A	466	48.257	63.301	0.043	1.00	0.00	C
	ATOM	3652	OG	SER	A	466	49.052	62.542	-0.854	1.00	0.00	O
	ATOM	3653	N	LEU	A	467	46.653	65.852	0.914	1.00	0.00	N
100	ATOM	3654	CA	LEU	A	467	45.791	66.512	1.883	1.00	0.00	C
	ATOM	3655	C	LEU	A	467	44.478	66.949	1.238	1.00	0.00	C
	ATOM	3656	O	LEU	A	467	43.402	66.757	1.810	1.00	0.00	O
105	ATOM	3657	CB	LEU	A	467	46.500	67.735	2.477	1.00	0.00	C

5	ATOM	3658	CG	LEU	A	467	45.768	68.414	3.635	1.00	0.00	C
	ATOM	3659	CD1	LEU	A	467	45.862	67.528	4.870	1.00	0.00	C
	ATOM	3660	CD2	LEU	A	467	46.382	69.786	3.914	1.00	0.00	C
	ATOM	3661	N	PHE	A	468	44.570	67.521	0.040	1.00	0.00	N
	ATOM	3662	CA	PHE	A	468	43.389	68.009	-0.664	1.00	0.00	C
10	ATOM	3663	C	PHE	A	468	42.411	66.905	-1.057	1.00	0.00	C
	ATOM	3664	O	PHE	A	468	41.270	67.190	-1.406	1.00	0.00	O
	ATOM	3665	CB	PHE	A	468	43.797	68.809	-1.908	1.00	0.00	C
	ATOM	3666	CG	PHE	A	468	42.672	69.607	-2.511	1.00	0.00	C
	ATOM	3667	CD1	PHE	A	468	41.955	70.518	-1.736	1.00	0.00	C
15	ATOM	3668	CD2	PHE	A	468	42.318	69.443	-3.847	1.00	0.00	C
	ATOM	3669	CE1	PHE	A	468	40.901	71.254	-2.284	1.00	0.00	C
	ATOM	3670	CE2	PHE	A	468	41.264	70.173	-4.402	1.00	0.00	C
	ATOM	3671	CZ	PHE	A	468	40.554	71.081	-3.617	1.00	0.00	C
	ATOM	3672	N	GLN	A	469	42.849	65.648	-1.003	1.00	0.00	N
20	ATOM	3673	CA	GLN	A	469	41.959	64.540	-1.337	1.00	0.00	C
	ATOM	3674	C	GLN	A	469	40.929	64.328	-0.229	1.00	0.00	C
	ATOM	3675	O	GLN	A	469	39.989	63.544	-0.387	1.00	0.00	O
	ATOM	3676	CB	GLN	A	469	42.753	63.248	-1.548	1.00	0.00	C
	ATOM	3677	CG	GLN	A	469	43.806	63.349	-2.645	1.00	0.00	C
25	ATOM	3678	CD	GLN	A	469	43.261	63.986	-3.912	1.00	0.00	C
	ATOM	3679	OE1	GLN	A	469	43.797	64.987	-4.395	1.00	0.00	O
	ATOM	3680	NE2	GLN	A	469	42.193	63.414	-4.453	1.00	0.00	N
	ATOM	3681	N	HIS	A	470	41.112	65.030	0.887	1.00	0.00	N
	ATOM	3682	CA	HIS	A	470	40.198	64.941	2.029	1.00	0.00	C
30	ATOM	3683	C	HIS	A	470	38.752	65.169	1.583	1.00	0.00	C
	ATOM	3684	O	HIS	A	470	38.509	65.904	0.621	1.00	0.00	O
	ATOM	3685	CB	HIS	A	470	40.569	65.988	3.087	1.00	0.00	C
	ATOM	3686	CG	HIS	A	470	39.589	66.071	4.217	1.00	0.00	C
	ATOM	3687	ND1	HIS	A	470	39.121	67.270	4.715	1.00	0.00	N
35	ATOM	3688	CD2	HIS	A	470	38.967	65.102	4.928	1.00	0.00	C
	ATOM	3689	CE1	HIS	A	470	38.251	67.033	5.681	1.00	0.00	C
	ATOM	3690	NE2	HIS	A	470	38.140	65.725	5.830	1.00	0.00	N
	ATOM	3691	N	HIS	A	471	37.796	64.566	2.292	1.00	0.00	N
	ATOM	3692	CA	HIS	A	471	36.389	64.715	1.928	1.00	0.00	C
40	ATOM	3693	C	HIS	A	471	35.769	66.104	2.151	1.00	0.00	C
	ATOM	3694	O	HIS	A	471	34.551	66.274	2.017	1.00	0.00	O
	ATOM	3695	CB	HIS	A	471	35.525	63.626	2.600	1.00	0.00	C
	ATOM	3696	CG	HIS	A	471	35.692	63.533	4.084	1.00	0.00	C
	ATOM	3697	ND1	HIS	A	471	36.653	62.743	4.678	1.00	0.00	N
45	ATOM	3698	CD2	HIS	A	471	35.010	64.121	5.096	1.00	0.00	C
	ATOM	3699	CE1	HIS	A	471	36.556	62.848	5.992	1.00	0.00	C
	ATOM	3700	NE2	HIS	A	471	35.568	63.678	6.270	1.00	0.00	N
	ATOM	3701	N	ASP	A	472	36.603	67.085	2.505	1.00	0.00	N
	ATOM	3702	CA	ASP	A	472	36.161	68.473	2.654	1.00	0.00	C
50	ATOM	3703	C	ASP	A	472	37.108	69.343	1.835	1.00	0.00	C
	ATOM	3704	O	ASP	A	472	37.035	70.574	1.867	1.00	0.00	O
	ATOM	3705	CB	ASP	A	472	36.183	68.934	4.111	1.00	0.00	C
	ATOM	3706	CG	ASP	A	472	35.075	68.320	4.922	1.00	0.00	C
	ATOM	3707	OD1	ASP	A	472	33.912	68.411	4.480	1.00	0.00	O
55	ATOM	3708	OD2	ASP	A	472	35.363	67.755	5.993	1.00	0.00	O
	ATOM	3709	N	GLY	A	473	38.002	68.685	1.104	1.00	0.00	N
	ATOM	3710	CA	GLY	A	473	38.952	69.400	0.275	1.00	0.00	C
	ATOM	3711	C	GLY	A	473	38.444	69.513	-1.147	1.00	0.00	C
	ATOM	3712	O	GLY	A	473	37.751	70.468	-1.490	1.00	0.00	O
60	ATOM	3713	N	ILE	A	474	38.779	68.526	-1.971	1.00	0.00	N
	ATOM	3714	CA	ILE	A	474	38.367	68.511	-3.370	1.00	0.00	C
	ATOM	3715	C	ILE	A	474	36.844	68.613	-3.530	1.00	0.00	C
	ATOM	3716	O	ILE	A	474	36.345	69.057	-4.566	1.00	0.00	O
	ATOM	3717	CB	ILE	A	474	38.898	67.230	-4.082	1.00	0.00	C
	ATOM	3718	CG1	ILE	A	474	38.613	67.307	-5.584	1.00	0.00	C

5	ATOM	3719	CG2	ILE	A	474	38.277	65.980	-3.457	1.00	0.00	C
	ATOM	3720	CD1	ILE	A	474	39.204	66.157	-6.386	1.00	0.00	C
	ATOM	3721	N	THR	A	475	36.118	68.214	-2.490	1.00	0.00	N
	ATOM	3722	CA	THR	A	475	34.656	68.252	-2.480	1.00	0.00	C
	ATOM	3723	C	THR	A	475	34.109	69.681	-2.518	1.00	0.00	C
10	ATOM	3724	O	THR	A	475	32.942	69.898	-2.861	1.00	0.00	O
	ATOM	3725	CB	THR	A	475	34.102	67.611	-1.205	1.00	0.00	C
	ATOM	3726	OG1	THR	A	475	34.637	68.306	-0.072	1.00	0.00	O
	ATOM	3727	CG2	THR	A	475	34.484	66.130	-1.124	1.00	0.00	C
	ATOM	3728	N	GLY	A	476	34.944	70.645	-2.144	1.00	0.00	N
15	ATOM	3729	CA	GLY	A	476	34.506	72.030	-2.124	1.00	0.00	C
	ATOM	3730	C	GLY	A	476	33.510	72.287	-1.002	1.00	0.00	C
	ATOM	3731	O	GLY	A	476	32.618	73.126	-1.136	1.00	0.00	O
	ATOM	3732	N	THR	A	477	33.660	71.572	0.110	1.00	0.00	N
	ATOM	3733	CA	THR	A	477	32.750	71.731	1.237	1.00	0.00	C
20	ATOM	3734	C	THR	A	477	33.371	72.333	2.499	1.00	0.00	C
	ATOM	3735	O	THR	A	477	32.853	72.135	3.598	1.00	0.00	O
	ATOM	3736	CB	THR	A	477	32.088	70.375	1.613	1.00	0.00	C
	ATOM	3737	OG1	THR	A	477	33.102	69.404	1.907	1.00	0.00	O
	ATOM	3738	CG2	THR	A	477	31.224	69.871	0.461	1.00	0.00	C
25	ATOM	3739	N	ALA	A	478	34.469	73.075	2.351	1.00	0.00	N
	ATOM	3740	CA	ALA	A	478	35.117	73.695	3.508	1.00	0.00	C
	ATOM	3741	C	ALA	A	478	34.800	75.188	3.586	1.00	0.00	C
	ATOM	3742	O	ALA	A	478	34.330	75.780	2.617	1.00	0.00	O
	ATOM	3743	CB	ALA	A	478	36.634	73.486	3.439	1.00	0.00	C
30	ATOM	3744	N	LYS	A	479	35.049	75.805	4.737	1.00	0.00	N
	ATOM	3745	CA	LYS	A	479	34.783	77.235	4.858	1.00	0.00	C
	ATOM	3746	C	LYS	A	479	35.761	77.985	3.960	1.00	0.00	C
	ATOM	3747	O	LYS	A	479	36.826	77.471	3.621	1.00	0.00	O
	ATOM	3748	CB	LYS	A	479	34.923	77.698	6.314	1.00	0.00	C
35	ATOM	3749	CG	LYS	A	479	33.900	77.052	7.251	1.00	0.00	C
	ATOM	3750	CD	LYS	A	479	33.934	77.645	8.658	1.00	0.00	C
	ATOM	3751	CE	LYS	A	479	33.032	78.863	8.800	1.00	0.00	C
	ATOM	3752	NZ	LYS	A	479	31.571	78.531	8.775	1.00	0.00	N
	ATOM	3753	N	THR	A	480	35.391	79.204	3.589	1.00	0.00	N
40	ATOM	3754	CA	THR	A	480	36.199	80.040	2.712	1.00	0.00	C
	ATOM	3755	C	THR	A	480	37.690	80.143	3.032	1.00	0.00	C
	ATOM	3756	O	THR	A	480	38.520	79.985	2.137	1.00	0.00	O
	ATOM	3757	CB	THR	A	480	35.612	81.464	2.643	1.00	0.00	C
	ATOM	3758	OG1	THR	A	480	34.266	81.390	2.164	1.00	0.00	O
45	ATOM	3759	CG2	THR	A	480	36.433	82.353	1.701	1.00	0.00	C
	ATOM	3760	N	HIS	A	481	38.042	80.400	4.290	1.00	0.00	N
	ATOM	3761	CA	HIS	A	481	39.454	80.536	4.628	1.00	0.00	C
	ATOM	3762	C	HIS	A	481	40.207	79.209	4.586	1.00	0.00	C
	ATOM	3763	O	HIS	A	481	41.431	79.192	4.444	1.00	0.00	O
50	ATOM	3764	CB	HIS	A	481	39.635	81.226	5.993	1.00	0.00	C
	ATOM	3765	CG	HIS	A	481	39.481	80.320	7.176	1.00	0.00	C
	ATOM	3766	ND1	HIS	A	481	38.258	79.860	7.614	1.00	0.00	N
	ATOM	3767	CD2	HIS	A	481	40.402	79.806	8.025	1.00	0.00	C
	ATOM	3768	CE1	HIS	A	481	38.432	79.103	8.682	1.00	0.00	C
55	ATOM	3769	NE2	HIS	A	481	39.724	79.053	8.952	1.00	0.00	N
	ATOM	3770	N	VAL	A	482	39.475	78.103	4.694	1.00	0.00	N
	ATOM	3771	CA	VAL	A	482	40.090	76.774	4.640	1.00	0.00	C
	ATOM	3772	C	VAL	A	482	40.382	76.450	3.172	1.00	0.00	C
	ATOM	3773	O	VAL	A	482	41.427	75.894	2.840	1.00	0.00	O
60	ATOM	3774	CB	VAL	A	482	39.157	75.705	5.255	1.00	0.00	C
	ATOM	3775	CG1	VAL	A	482	39.828	74.327	5.231	1.00	0.00	C
	ATOM	3776	CG2	VAL	A	482	38.819	76.096	6.693	1.00	0.00	C
	ATOM	3777	N	VAL	A	483	39.452	76.808	2.292	1.00	0.00	N
	ATOM	3778	CA	VAL	A	483	39.645	76.592	0.862	1.00	0.00	C
	ATOM	3779	C	VAL	A	483	40.898	77.365	0.446	1.00	0.00	C

5	ATOM	3780	O	VAL	A	483	41.707	76.888	-0.353	1.00	0.00	O
	ATOM	3781	CB	VAL	A	483	38.432	77.112	0.057	1.00	0.00	C
	ATOM	3782	CG1	VAL	A	483	38.716	77.030	-1.437	1.00	0.00	C
	ATOM	3783	CG2	VAL	A	483	37.191	76.285	0.411	1.00	0.00	C
	ATOM	3784	N	VAL	A	484	41.059	78.560	1.003	1.00	0.00	N
10	ATOM	3785	CA	VAL	A	484	42.224	79.379	0.698	1.00	0.00	C
	ATOM	3786	C	VAL	A	484	43.495	78.670	1.147	1.00	0.00	C
	ATOM	3787	O	VAL	A	484	44.498	78.678	0.434	1.00	0.00	O
	ATOM	3788	CB	VAL	A	484	42.131	80.759	1.377	1.00	0.00	C
	ATOM	3789	CG1	VAL	A	484	43.461	81.500	1.252	1.00	0.00	C
15	ATOM	3790	CG2	VAL	A	484	41.018	81.568	0.730	1.00	0.00	C
	ATOM	3791	N	ASP	A	485	43.454	78.047	2.323	1.00	0.00	N
	ATOM	3792	CA	ASP	A	485	44.621	77.326	2.822	1.00	0.00	C
	ATOM	3793	C	ASP	A	485	44.993	76.185	1.870	1.00	0.00	C
	ATOM	3794	O	ASP	A	485	46.166	75.996	1.541	1.00	0.00	O
20	ATOM	3795	CB	ASP	A	485	44.354	76.751	4.215	1.00	0.00	C
	ATOM	3796	CG	ASP	A	485	45.600	76.156	4.843	1.00	0.00	C
	ATOM	3797	OD1	ASP	A	485	45.549	75.002	5.314	1.00	0.00	O
	ATOM	3798	OD2	ASP	A	485	46.640	76.850	4.866	1.00	0.00	O
	ATOM	3799	N	TYR	A	486	43.996	75.418	1.434	1.00	0.00	N
25	ATOM	3800	CA	TYR	A	486	44.251	74.307	0.515	1.00	0.00	C
	ATOM	3801	C	TYR	A	486	44.872	74.832	-0.777	1.00	0.00	C
	ATOM	3802	O	TYR	A	486	45.799	74.228	-1.314	1.00	0.00	O
	ATOM	3803	CB	TYR	A	486	42.951	73.571	0.174	1.00	0.00	C
	ATOM	3804	CG	TYR	A	486	42.351	72.736	1.291	1.00	0.00	C
30	ATOM	3805	CD1	TYR	A	486	40.971	72.715	1.492	1.00	0.00	C
	ATOM	3806	CD2	TYR	A	486	43.148	71.917	2.101	1.00	0.00	C
	ATOM	3807	CE1	TYR	A	486	40.387	71.897	2.469	1.00	0.00	C
	ATOM	3808	CE2	TYR	A	486	42.569	71.090	3.086	1.00	0.00	C
	ATOM	3809	CZ	TYR	A	486	41.186	71.090	3.257	1.00	0.00	C
35	ATOM	3810	OH	TYR	A	486	40.590	70.278	4.200	1.00	0.00	O
	ATOM	3811	N	GLU	A	487	44.357	75.958	-1.270	1.00	0.00	N
	ATOM	3812	CA	GLU	A	487	44.865	76.552	-2.505	1.00	0.00	C
	ATOM	3813	C	GLU	A	487	46.320	76.979	-2.341	1.00	0.00	C
	ATOM	3814	O	GLU	A	487	47.149	76.727	-3.213	1.00	0.00	O
40	ATOM	3815	CB	GLU	A	487	44.030	77.772	-2.920	1.00	0.00	C
	ATOM	3816	CG	GLU	A	487	44.302	78.202	-4.361	1.00	0.00	C
	ATOM	3817	CD	GLU	A	487	43.595	79.487	-4.766	1.00	0.00	C
	ATOM	3818	OE1	GLU	A	487	42.428	79.694	-4.372	1.00	0.00	O
	ATOM	3819	OE2	GLU	A	487	44.210	80.286	-5.502	1.00	0.00	O
45	ATOM	3820	N	GLN	A	488	46.622	77.636	-1.226	1.00	0.00	N
	ATOM	3821	CA	GLN	A	488	47.986	78.084	-0.957	1.00	0.00	C
	ATOM	3822	C	GLN	A	488	48.929	76.888	-0.920	1.00	0.00	C
	ATOM	3823	O	GLN	A	488	50.028	76.937	-1.472	1.00	0.00	O
	ATOM	3824	CB	GLN	A	488	48.051	78.833	0.380	1.00	0.00	C
50	ATOM	3825	CG	GLN	A	488	47.360	80.189	0.363	1.00	0.00	C
	ATOM	3826	CD	GLN	A	488	47.390	80.884	1.713	1.00	0.00	C
	ATOM	3827	OE1	GLN	A	488	47.028	82.054	1.825	1.00	0.00	O
	ATOM	3828	NE2	GLN	A	488	47.818	80.165	2.746	1.00	0.00	N
	ATOM	3829	N	ARG	A	489	48.497	75.822	-0.253	1.00	0.00	N
55	ATOM	3830	CA	ARG	A	489	49.295	74.606	-0.155	1.00	0.00	C
	ATOM	3831	C	ARG	A	489	49.530	74.010	-1.540	1.00	0.00	C
	ATOM	3832	O	ARG	A	489	50.643	73.593	-1.867	1.00	0.00	O
	ATOM	3833	CB	ARG	A	489	48.591	73.574	0.735	1.00	0.00	C
	ATOM	3834	CG	ARG	A	489	48.625	73.891	2.233	1.00	0.00	C
60	ATOM	3835	CD	ARG	A	489	47.696	72.954	3.006	1.00	0.00	C
	ATOM	3836	NE	ARG	A	489	47.770	73.139	4.455	1.00	0.00	N
	ATOM	3837	CZ	ARG	A	489	48.680	72.571	5.244	1.00	0.00	C
	ATOM	3838	NH1	ARG	A	489	49.606	71.771	4.730	1.00	0.00	N
	ATOM	3839	NH2	ARG	A	489	48.665	72.806	6.552	1.00	0.00	N
	ATOM	3840	N	MET	A	490	48.487	73.962	-2.363	1.00	0.00	N

5	ATOM	3841	CA	MET	A	490	48.662	73.406	-3.699	1.00	0.00	C
	ATOM	3842	C	MET	A	490	49.544	74.308	-4.558	1.00	0.00	C
	ATOM	3843	O	MET	A	490	50.285	73.827	-5.414	1.00	0.00	O
	ATOM	3844	CB	MET	A	490	47.305	73.159	-4.373	1.00	0.00	C
	ATOM	3845	CG	MET	A	490	46.539	71.993	-3.748	1.00	0.00	C
10	ATOM	3846	SD	MET	A	490	45.205	71.339	-4.786	1.00	0.00	S
	ATOM	3847	CE	MET	A	490	43.887	72.488	-4.381	1.00	0.00	C
	ATOM	3848	N	GLN	A	491	49.482	75.613	-4.319	1.00	0.00	N
	ATOM	3849	CA	GLN	A	491	50.303	76.543	-5.084	1.00	0.00	C
	ATOM	3850	C	GLN	A	491	51.775	76.263	-4.790	1.00	0.00	C
15	ATOM	3851	O	GLN	A	491	52.615	76.259	-5.694	1.00	0.00	O
	ATOM	3852	CB	GLN	A	491	49.960	77.985	-4.713	1.00	0.00	C
	ATOM	3853	CG	GLN	A	491	50.638	79.023	-5.585	1.00	0.00	C
	ATOM	3854	CD	GLN	A	491	50.355	78.817	-7.062	1.00	0.00	C
	ATOM	3855	OE1	GLN	A	491	51.044	78.050	-7.741	1.00	0.00	O
20	ATOM	3856	NE2	GLN	A	491	49.329	79.493	-7.564	1.00	0.00	N
	ATOM	3857	N	GLU	A	492	52.083	76.020	-3.520	1.00	0.00	N
	ATOM	3858	CA	GLU	A	492	53.453	75.728	-3.123	1.00	0.00	C
	ATOM	3859	C	GLU	A	492	53.874	74.393	-3.737	1.00	0.00	C
	ATOM	3860	O	GLU	A	492	55.019	74.223	-4.154	1.00	0.00	O
25	ATOM	3861	CB	GLU	A	492	53.554	75.674	-1.595	1.00	0.00	C
	ATOM	3862	CG	GLU	A	492	52.993	76.921	-0.916	1.00	0.00	C
	ATOM	3863	CD	GLU	A	492	52.973	76.826	0.599	1.00	0.00	C
	ATOM	3864	OE1	GLU	A	492	52.545	75.780	1.135	1.00	0.00	O
	ATOM	3865	OE2	GLU	A	492	53.372	77.810	1.259	1.00	0.00	O
30	ATOM	3866	N	ALA	A	493	52.939	73.448	-3.798	1.00	0.00	N
	ATOM	3867	CA	ALA	A	493	53.219	72.135	-4.376	1.00	0.00	C
	ATOM	3868	C	ALA	A	493	53.553	72.289	-5.861	1.00	0.00	C
	ATOM	3869	O	ALA	A	493	54.494	71.668	-6.365	1.00	0.00	O
	ATOM	3870	CB	ALA	A	493	52.010	71.212	-4.199	1.00	0.00	C
35	ATOM	3871	N	LEU	A	494	52.781	73.115	-6.562	1.00	0.00	N
	ATOM	3872	CA	LEU	A	494	53.024	73.336	-7.986	1.00	0.00	C
	ATOM	3873	C	LEU	A	494	54.425	73.900	-8.208	1.00	0.00	C
	ATOM	3874	O	LEU	A	494	55.142	73.453	-9.098	1.00	0.00	O
	ATOM	3875	CB	LEU	A	494	51.971	74.287	-8.573	1.00	0.00	C
40	ATOM	3876	CG	LEU	A	494	50.574	73.683	-8.752	1.00	0.00	C
	ATOM	3877	CD1	LEU	A	494	49.569	74.769	-9.145	1.00	0.00	C
	ATOM	3878	CD2	LEU	A	494	50.636	72.601	-9.818	1.00	0.00	C
	ATOM	3879	N	LYS	A	495	54.812	74.872	-7.385	1.00	0.00	N
	ATOM	3880	CA	LYS	A	495	56.134	75.484	-7.487	1.00	0.00	C
45	ATOM	3881	C	LYS	A	495	57.221	74.450	-7.200	1.00	0.00	C
	ATOM	3882	O	LYS	A	495	58.269	74.443	-7.850	1.00	0.00	O
	ATOM	3883	CB	LYS	A	495	56.253	76.660	-6.510	1.00	0.00	C
	ATOM	3884	CG	LYS	A	495	55.284	77.803	-6.812	1.00	0.00	C
	ATOM	3885	CD	LYS	A	495	55.563	79.039	-5.960	1.00	0.00	C
50	ATOM	3886	CE	LYS	A	495	55.364	78.767	-4.477	1.00	0.00	C
	ATOM	3887	NZ	LYS	A	495	55.650	79.976	-3.647	1.00	0.00	N
	ATOM	3888	N	ALA	A	496	56.966	73.577	-6.228	1.00	0.00	N
	ATOM	3889	CA	ALA	A	496	57.917	72.528	-5.881	1.00	0.00	C
	ATOM	3890	C	ALA	A	496	58.100	71.602	-7.084	1.00	0.00	C
55	ATOM	3891	O	ALA	A	496	59.221	71.220	-7.426	1.00	0.00	O
	ATOM	3892	CB	ALA	A	496	57.410	71.732	-4.682	1.00	0.00	C
	ATOM	3893	N	CYS	A	497	56.991	71.234	-7.719	1.00	0.00	N
	ATOM	3894	CA	CYS	A	497	57.045	70.362	-8.886	1.00	0.00	C
	ATOM	3895	C	CYS	A	497	57.821	71.035	-10.011	1.00	0.00	C
60	ATOM	3896	O	CYS	A	497	58.659	70.405	-10.653	1.00	0.00	O
	ATOM	3897	CB	CYS	A	497	55.628	70.003	-9.359	1.00	0.00	C
	ATOM	3898	SG	CYS	A	497	54.775	68.818	-8.281	1.00	0.00	S
	ATOM	3899	N	GLN	A	498	57.551	72.316	-10.248	1.00	0.00	N
	ATOM	3900	CA	GLN	A	498	58.258	73.039	-11.302	1.00	0.00	C
	ATOM	3901	C	GLN	A	498	59.766	73.017	-11.055	1.00	0.00	C

5	ATOM	3902	O	GLN	A	498	60.545	72.760	-11.971	1.00	0.00	O
	ATOM	3903	CB	GLN	A	498	57.780	74.492	-11.385	1.00	0.00	C
	ATOM	3904	CG	GLN	A	498	58.583	75.337	-12.367	1.00	0.00	C
	ATOM	3905	CD	GLN	A	498	58.076	76.764	-12.475	1.00	0.00	C
	ATOM	3906	OE1	GLN	A	498	57.891	77.449	-11.464	1.00	0.00	O
10	ATOM	3907	NE2	GLN	A	498	57.859	77.225	-13.704	1.00	0.00	N
	ATOM	3908	N	MET	A	499	60.178	73.292	-9.820	1.00	0.00	N
	ATOM	3909	CA	MET	A	499	61.603	73.297	-9.484	1.00	0.00	C
	ATOM	3910	C	MET	A	499	62.252	71.947	-9.800	1.00	0.00	C
	ATOM	3911	O	MET	A	499	63.304	71.887	-10.435	1.00	0.00	O
15	ATOM	3912	CB	MET	A	499	61.793	73.633	-8.000	1.00	0.00	C
	ATOM	3913	CG	MET	A	499	63.226	73.497	-7.485	1.00	0.00	C
	ATOM	3914	SD	MET	A	499	64.443	74.506	-8.376	1.00	0.00	S
	ATOM	3915	CE	MET	A	499	64.087	76.121	-7.718	1.00	0.00	C
	ATOM	3916	N	VAL	A	500	61.623	70.865	-9.351	1.00	0.00	N
20	ATOM	3917	CA	VAL	A	500	62.153	69.528	-9.595	1.00	0.00	C
	ATOM	3918	C	VAL	A	500	62.167	69.199	-11.085	1.00	0.00	C
	ATOM	3919	O	VAL	A	500	63.152	68.682	-11.609	1.00	0.00	O
	ATOM	3920	CB	VAL	A	500	61.321	68.466	-8.837	1.00	0.00	C
	ATOM	3921	CG1	VAL	A	500	61.744	67.065	-9.250	1.00	0.00	C
25	ATOM	3922	CG2	VAL	A	500	61.513	68.647	-7.332	1.00	0.00	C
	ATOM	3923	N	MET	A	501	61.072	69.508	-11.767	1.00	0.00	N
	ATOM	3924	CA	MET	A	501	60.975	69.229	-13.194	1.00	0.00	C
	ATOM	3925	C	MET	A	501	62.047	69.947	-14.007	1.00	0.00	C
	ATOM	3926	O	MET	A	501	62.746	69.318	-14.806	1.00	0.00	O
30	ATOM	3927	CB	MET	A	501	59.585	69.612	-13.705	1.00	0.00	C
	ATOM	3928	CG	MET	A	501	58.475	68.709	-13.191	1.00	0.00	C
	ATOM	3929	SD	MET	A	501	56.838	69.371	-13.539	1.00	0.00	S
	ATOM	3930	CE	MET	A	501	56.676	68.974	-15.250	1.00	0.00	C
	ATOM	3931	N	GLN	A	502	62.186	71.256	-13.802	1.00	0.00	N
35	ATOM	3932	CA	GLN	A	502	63.171	72.028	-14.555	1.00	0.00	C
	ATOM	3933	C	GLN	A	502	64.610	71.604	-14.253	1.00	0.00	C
	ATOM	3934	O	GLN	A	502	65.447	71.561	-15.159	1.00	0.00	O
	ATOM	3935	CB	GLN	A	502	62.967	73.530	-14.317	1.00	0.00	C
	ATOM	3936	CG	GLN	A	502	63.208	74.016	-12.900	1.00	0.00	C
40	ATOM	3937	CD	GLN	A	502	64.597	74.611	-12.726	1.00	0.00	C
	ATOM	3938	OE1	GLN	A	502	65.348	74.753	-13.697	1.00	0.00	O
	ATOM	3939	NE2	GLN	A	502	64.938	74.974	-11.494	1.00	0.00	N
	ATOM	3940	N	GLN	A	503	64.905	71.287	-12.995	1.00	0.00	N
	ATOM	3941	CA	GLN	A	503	66.253	70.825	-12.650	1.00	0.00	C
45	ATOM	3942	C	GLN	A	503	66.510	69.504	-13.381	1.00	0.00	C
	ATOM	3943	O	GLN	A	503	67.595	69.277	-13.914	1.00	0.00	O
	ATOM	3944	CB	GLN	A	503	66.389	70.594	-11.141	1.00	0.00	C
	ATOM	3945	CG	GLN	A	503	66.593	71.853	-10.301	1.00	0.00	C
	ATOM	3946	CD	GLN	A	503	67.940	72.511	-10.549	1.00	0.00	C
50	ATOM	3947	OE1	GLN	A	503	68.935	71.833	-10.818	1.00	0.00	O
	ATOM	3948	NE2	GLN	A	503	67.982	73.835	-10.442	1.00	0.00	N
	ATOM	3949	N	SER	A	504	65.503	68.632	-13.398	1.00	0.00	N
	ATOM	3950	CA	SER	A	504	65.625	67.338	-14.067	1.00	0.00	C
	ATOM	3951	C	SER	A	504	65.855	67.486	-15.567	1.00	0.00	C
55	ATOM	3952	O	SER	A	504	66.715	66.812	-16.138	1.00	0.00	O
	ATOM	3953	CB	SER	A	504	64.369	66.490	-13.829	1.00	0.00	C
	ATOM	3954	OG	SER	A	504	64.235	66.150	-12.460	1.00	0.00	O
	ATOM	3955	N	VAL	A	505	65.087	68.361	-16.206	1.00	0.00	N
	ATOM	3956	CA	VAL	A	505	65.233	68.575	-17.643	1.00	0.00	C
60	ATOM	3957	C	VAL	A	505	66.647	69.040	-17.974	1.00	0.00	C
	ATOM	3958	O	VAL	A	505	67.269	68.555	-18.921	1.00	0.00	O
	ATOM	3959	CB	VAL	A	505	64.224	69.623	-18.165	1.00	0.00	C
	ATOM	3960	CG1	VAL	A	505	64.569	70.018	-19.605	1.00	0.00	C
	ATOM	3961	CG2	VAL	A	505	62.805	69.051	-18.105	1.00	0.00	C
	ATOM	3962	N	TYR	A	506	67.160	69.977	-17.187	1.00	0.00	N

5	ATOM	3963	CA	TYR	A	506	68.501	70.490	-17.425	1.00	0.00	C
	ATOM	3964	C	TYR	A	506	69.557	69.378	-17.364	1.00	0.00	C
	ATOM	3965	O	TYR	A	506	70.458	69.313	-18.206	1.00	0.00	O
	ATOM	3966	CB	TYR	A	506	68.827	71.584	-16.407	1.00	0.00	C
	ATOM	3967	CG	TYR	A	506	70.168	72.230	-16.641	1.00	0.00	C
10	ATOM	3968	CD1	TYR	A	506	70.475	72.804	-17.875	1.00	0.00	C
	ATOM	3969	CD2	TYR	A	506	71.138	72.252	-15.641	1.00	0.00	C
	ATOM	3970	CE1	TYR	A	506	71.717	73.382	-18.109	1.00	0.00	C
	ATOM	3971	CE2	TYR	A	506	72.388	72.826	-15.868	1.00	0.00	C
	ATOM	3972	CZ	TYR	A	506	72.667	73.387	-17.106	1.00	0.00	C
15	ATOM	3973	OH	TYR	A	506	73.900	73.948	-17.349	1.00	0.00	O
	ATOM	3974	N	ARG	A	507	69.435	68.498	-16.378	1.00	0.00	N
	ATOM	3975	CA	ARG	A	507	70.383	67.397	-16.214	1.00	0.00	C
	ATOM	3976	C	ARG	A	507	70.247	66.332	-17.310	1.00	0.00	C
	ATOM	3977	O	ARG	A	507	71.241	65.774	-17.775	1.00	0.00	O
20	ATOM	3978	CB	ARG	A	507	70.196	66.750	-14.837	1.00	0.00	C
	ATOM	3979	CG	ARG	A	507	71.242	65.699	-14.490	1.00	0.00	C
	ATOM	3980	CD	ARG	A	507	71.042	65.179	-13.074	1.00	0.00	C
	ATOM	3981	NE	ARG	A	507	72.059	64.198	-12.700	1.00	0.00	N
	ATOM	3982	CZ	ARG	A	507	72.170	63.659	-11.489	1.00	0.00	C
25	ATOM	3983	NH1	ARG	A	507	71.327	64.004	-10.524	1.00	0.00	N
	ATOM	3984	NH2	ARG	A	507	73.124	62.772	-11.242	1.00	0.00	N
	ATOM	3985	N	LEU	A	508	69.016	66.061	-17.725	1.00	0.00	N
	ATOM	3986	CA	LEU	A	508	68.760	65.056	-18.752	1.00	0.00	C
	ATOM	3987	C	LEU	A	508	69.143	65.484	-20.172	1.00	0.00	C
30	ATOM	3988	O	LEU	A	508	69.398	64.634	-21.029	1.00	0.00	O
	ATOM	3989	CB	LEU	A	508	67.277	64.664	-18.739	1.00	0.00	C
	ATOM	3990	CG	LEU	A	508	66.779	63.779	-17.590	1.00	0.00	C
	ATOM	3991	CD1	LEU	A	508	65.251	63.830	-17.527	1.00	0.00	C
	ATOM	3992	CD2	LEU	A	508	67.265	62.350	-17.791	1.00	0.00	C
35	ATOM	3993	N	LEU	A	509	69.186	66.788	-20.424	1.00	0.00	N
	ATOM	3994	CA	LEU	A	509	69.493	67.277	-21.765	1.00	0.00	C
	ATOM	3995	C	LEU	A	509	70.764	68.106	-21.916	1.00	0.00	C
	ATOM	3996	O	LEU	A	509	70.912	68.842	-22.897	1.00	0.00	O
	ATOM	3997	CB	LEU	A	509	68.302	68.073	-22.304	1.00	0.00	C
40	ATOM	3998	CG	LEU	A	509	67.026	67.270	-22.573	1.00	0.00	C
	ATOM	3999	CD1	LEU	A	509	65.915	68.213	-23.013	1.00	0.00	C
	ATOM	4000	CD2	LEU	A	509	67.292	66.218	-23.646	1.00	0.00	C
	ATOM	4001	N	THR	A	510	71.679	67.988	-20.960	1.00	0.00	N
	ATOM	4002	CA	THR	A	510	72.936	68.728	-21.017	1.00	0.00	C
45	ATOM	4003	C	THR	A	510	74.098	67.740	-21.024	1.00	0.00	C
	ATOM	4004	O	THR	A	510	74.104	66.782	-20.251	1.00	0.00	O
	ATOM	4005	CB	THR	A	510	73.082	69.672	-19.803	1.00	0.00	C
	ATOM	4006	OG1	THR	A	510	71.994	70.604	-19.794	1.00	0.00	O
	ATOM	4007	CG2	THR	A	510	74.400	70.447	-19.870	1.00	0.00	C
50	ATOM	4008	N	LYS	A	511	75.073	67.961	-21.902	1.00	0.00	N
	ATOM	4009	CA	LYS	A	511	76.231	67.068	-21.971	1.00	0.00	C
	ATOM	4010	C	LYS	A	511	76.783	66.906	-20.562	1.00	0.00	C
	ATOM	4011	O	LYS	A	511	77.065	67.890	-19.875	1.00	0.00	O
	ATOM	4012	CB	LYS	A	511	77.309	67.641	-22.900	1.00	0.00	C
55	ATOM	4013	CG	LYS	A	511	78.522	66.738	-23.040	1.00	0.00	C
	ATOM	4014	CD	LYS	A	511	79.568	67.314	-23.977	1.00	0.00	C
	ATOM	4015	CE	LYS	A	511	80.772	66.384	-24.062	1.00	0.00	C
	ATOM	4016	NZ	LYS	A	511	81.836	66.903	-24.963	1.00	0.00	N
	ATOM	4017	N	PRO	A	512	76.940	65.653	-20.107	1.00	0.00	N
60	ATOM	4018	CA	PRO	A	512	77.450	65.348	-18.768	1.00	0.00	C
	ATOM	4019	C	PRO	A	512	78.682	66.121	-18.299	1.00	0.00	C
	ATOM	4020	O	PRO	A	512	78.699	66.639	-17.184	1.00	0.00	O
	ATOM	4021	CB	PRO	A	512	77.698	63.843	-18.834	1.00	0.00	C
	ATOM	4022	CG	PRO	A	512	76.615	63.379	-19.750	1.00	0.00	C
	ATOM	4023	CD	PRO	A	512	76.668	64.412	-20.855	1.00	0.00	C

5	ATOM	4024	N	SER	A	513	79.709	66.198	-19.139	1.00	0.00	N
	ATOM	4025	CA	SER	A	513	80.935	66.896	-18.759	1.00	0.00	C
	ATOM	4026	C	SER	A	513	80.800	68.418	-18.706	1.00	0.00	C
	ATOM	4027	O	SER	A	513	81.724	69.111	-18.279	1.00	0.00	O
	ATOM	4028	CB	SER	A	513	82.081	66.499	-19.701	1.00	0.00	C
	ATOM	4029	OG	SER	A	513	81.760	66.759	-21.056	1.00	0.00	O
	ATOM	4030	N	ILE	A	514	79.647	68.931	-19.131	1.00	0.00	N
	ATOM	4031	CA	ILE	A	514	79.380	70.369	-19.127	1.00	0.00	C
10	ATOM	4032	C	ILE	A	514	78.389	70.727	-18.014	1.00	0.00	C
	ATOM	4033	O	ILE	A	514	78.412	71.836	-17.481	1.00	0.00	O
	ATOM	4034	CB	ILE	A	514	78.790	70.831	-20.492	1.00	0.00	C
	ATOM	4035	CG1	ILE	A	514	79.849	70.697	-21.589	1.00	0.00	C
15	ATOM	4036	CG2	ILE	A	514	78.302	72.276	-20.401	1.00	0.00	C
	ATOM	4037	CD1	ILE	A	514	79.354	71.076	-22.974	1.00	0.00	C
	ATOM	4038	N	TYR	A	515	77.525	69.775	-17.671	1.00	0.00	N
	ATOM	4039	CA	TYR	A	515	76.511	69.962	-16.630	1.00	0.00	C
	ATOM	4040	C	TYR	A	515	77.099	70.524	-15.330	1.00	0.00	C
20	ATOM	4041	O	TYR	A	515	77.925	69.883	-14.681	1.00	0.00	O
	ATOM	4042	CB	TYR	A	515	75.817	68.621	-16.373	1.00	0.00	C
	ATOM	4043	CG	TYR	A	515	74.779	68.618	-15.276	1.00	0.00	C
	ATOM	4044	CD1	TYR	A	515	73.625	69.397	-15.369	1.00	0.00	C
	ATOM	4045	CD2	TYR	A	515	74.936	67.802	-14.157	1.00	0.00	C
	ATOM	4046	CE1	TYR	A	515	72.648	69.359	-14.368	1.00	0.00	C
25	ATOM	4047	CE2	TYR	A	515	73.974	67.754	-13.157	1.00	0.00	C
	ATOM	4048	CZ	TYR	A	515	72.832	68.533	-13.265	1.00	0.00	O
	ATOM	4049	OH	TYR	A	515	71.881	68.475	-12.270	1.00	0.00	C
	ATOM	4050	N	SER	A	516	76.665	71.728	-14.959	1.00	0.00	N
30	ATOM	4051	CA	SER	A	516	77.141	72.404	-13.746	1.00	0.00	C
	ATOM	4052	C	SER	A	516	75.931	73.040	-13.062	1.00	0.00	C
	ATOM	4053	O	SER	A	516	75.685	74.243	-13.188	1.00	0.00	O
	ATOM	4054	CB	SER	A	516	78.159	73.485	-14.121	1.00	0.00	C
	ATOM	4055	OG	SER	A	516	78.766	74.044	-12.969	1.00	0.00	O
35	ATOM	4056	N	PRO	A	517	75.166	72.236	-12.310	1.00	0.00	N
	ATOM	4057	CA	PRO	A	517	73.967	72.700	-11.614	1.00	0.00	C
	ATOM	4058	C	PRO	A	517	74.064	73.562	-10.365	1.00	0.00	C
	ATOM	4059	O	PRO	A	517	74.917	73.360	-9.503	1.00	0.00	O
	ATOM	4060	CB	PRO	A	517	73.229	71.399	-11.323	1.00	0.00	C
40	ATOM	4061	CG	PRO	A	517	74.356	70.483	-10.991	1.00	0.00	C
	ATOM	4062	CD	PRO	A	517	75.355	70.788	-12.102	1.00	0.00	C
	ATOM	4063	N	ASP	A	518	73.153	74.528	-10.303	1.00	0.00	N
	ATOM	4064	CA	ASP	A	518	72.978	75.418	-9.164	1.00	0.00	C
	ATOM	4065	C	ASP	A	518	71.560	74.999	-8.789	1.00	0.00	C
45	ATOM	4066	O	ASP	A	518	70.597	75.413	-9.434	1.00	0.00	O
	ATOM	4067	CB	ASP	A	518	72.969	76.885	-9.586	1.00	0.00	C
	ATOM	4068	CG	ASP	A	518	72.657	77.819	-8.426	1.00	0.00	C
	ATOM	4069	OD1	ASP	A	518	72.003	77.372	-7.457	1.00	0.00	O
	ATOM	4070	OD2	ASP	A	518	73.051	79.001	-8.487	1.00	0.00	O
50	ATOM	4071	N	PHE	A	519	71.437	74.166	-7.764	1.00	0.00	N
	ATOM	4072	CA	PHE	A	519	70.141	73.644	-7.352	1.00	0.00	C
	ATOM	4073	C	PHE	A	519	69.077	74.654	-6.947	1.00	0.00	C
	ATOM	4074	O	PHE	A	519	67.931	74.279	-6.698	1.00	0.00	O
	ATOM	4075	CB	PHE	A	519	70.341	72.608	-6.246	1.00	0.00	C
55	ATOM	4076	CG	PHE	A	519	71.207	71.448	-6.664	1.00	0.00	C
	ATOM	4077	CD1	PHE	A	519	70.948	70.765	-7.851	1.00	0.00	C
	ATOM	4078	CD2	PHE	A	519	72.287	71.049	-5.884	1.00	0.00	C
	ATOM	4079	CE1	PHE	A	519	71.754	69.700	-8.257	1.00	0.00	C
	ATOM	4080	CE2	PHE	A	519	73.098	69.987	-6.280	1.00	0.00	C
60	ATOM	4081	CZ	PHE	A	519	72.832	69.311	-7.469	1.00	0.00	C
	ATOM	4082	N	SER	A	520	69.439	75.931	-6.902	1.00	0.00	N
	ATOM	4083	CA	SER	A	520	68.483	76.973	-6.535	1.00	0.00	C
	ATOM	4084	C	SER	A	520	68.133	77.823	-7.754	1.00	0.00	C

5	ATOM	4085	O	SER	A	520	67.260	78.688	-7.691	1.00	0.00	O
	ATOM	4086	CB	SER	A	520	69.073	77.879	-5.453	1.00	0.00	C
	ATOM	4087	OG	SER	A	520	70.132	78.665	-5.978	1.00	0.00	O
	ATOM	4088	N	PHE	A	521	68.822	77.565	-8.860	1.00	0.00	N
	ATOM	4089	CA	PHE	A	521	68.629	78.317	-10.095	1.00	0.00	C
10	ATOM	4090	C	PHE	A	521	67.500	77.774	-10.970	1.00	0.00	C
	ATOM	4091	O	PHE	A	521	67.237	76.574	-10.990	1.00	0.00	O
	ATOM	4092	CB	PHE	A	521	69.936	78.319	-10.895	1.00	0.00	C
	ATOM	4093	CG	PHE	A	521	69.952	79.299	-12.034	1.00	0.00	C
	ATOM	4094	CD1	PHE	A	521	70.084	80.664	-11.790	1.00	0.00	C
15	ATOM	4095	CD2	PHE	A	521	69.812	78.862	-13.348	1.00	0.00	C
	ATOM	4096	CE1	PHE	A	521	70.075	81.583	-12.842	1.00	0.00	C
	ATOM	4097	CE2	PHE	A	521	69.801	79.768	-14.406	1.00	0.00	C
	ATOM	4098	CZ	PHE	A	521	69.932	81.133	-14.152	1.00	0.00	C
	ATOM	4099	N	SER	A	522	66.837	78.671	-11.697	1.00	0.00	N
20	ATOM	4100	CA	SER	A	522	65.753	78.280	-12.590	1.00	0.00	C
	ATOM	4101	C	SER	A	522	66.264	78.252	-14.027	1.00	0.00	C
	ATOM	4102	O	SER	A	522	66.320	79.286	-14.692	1.00	0.00	O
	ATOM	4103	CB	SER	A	522	64.580	79.261	-12.477	1.00	0.00	C
	ATOM	4104	OG	SER	A	522	63.927	79.133	-11.224	1.00	0.00	O
25	ATOM	4105	N	TYR	A	523	66.645	77.070	-14.497	1.00	0.00	N
	ATOM	4106	CA	TYR	A	523	67.149	76.919	-15.857	1.00	0.00	C
	ATOM	4107	C	TYR	A	523	66.025	77.000	-16.868	1.00	0.00	C
	ATOM	4108	O	TYR	A	523	66.228	77.440	-18.002	1.00	0.00	O
	ATOM	4109	CB	TYR	A	523	67.885	75.586	-16.013	1.00	0.00	C
30	ATOM	4110	CG	TYR	A	523	69.160	75.523	-15.211	1.00	0.00	C
	ATOM	4111	CD1	TYR	A	523	69.188	74.932	-13.949	1.00	0.00	C
	ATOM	4112	CD2	TYR	A	523	70.335	76.106	-15.695	1.00	0.00	C
	ATOM	4113	CE1	TYR	A	523	70.358	74.926	-13.187	1.00	0.00	C
	ATOM	4114	CE2	TYR	A	523	71.498	76.108	-14.945	1.00	0.00	C
35	ATOM	4115	CZ	TYR	A	523	71.506	75.519	-13.693	1.00	0.00	C
	ATOM	4116	OH	TYR	A	523	72.660	75.542	-12.944	1.00	0.00	O
	ATOM	4117	N	PHE	A	524	64.840	76.559	-16.456	1.00	0.00	N
	ATOM	4118	CA	PHE	A	524	63.665	76.603	-17.316	1.00	0.00	C
	ATOM	4119	C	PHE	A	524	62.464	77.104	-16.539	1.00	0.00	C
40	ATOM	4120	O	PHE	A	524	62.401	76.986	-15.315	1.00	0.00	O
	ATOM	4121	CB	PHE	A	524	63.293	75.221	-17.857	1.00	0.00	C
	ATOM	4122	CG	PHE	A	524	64.335	74.593	-18.726	1.00	0.00	C
	ATOM	4123	CD1	PHE	A	524	65.402	73.902	-18.165	1.00	0.00	C
	ATOM	4124	CD2	PHE	A	524	64.226	74.654	-20.114	1.00	0.00	C
45	ATOM	4125	CE1	PHE	A	524	66.348	73.276	-18.972	1.00	0.00	C
	ATOM	4126	CE2	PHE	A	524	65.166	74.031	-20.931	1.00	0.00	C
	ATOM	4127	CZ	PHE	A	524	66.230	73.338	-20.355	1.00	0.00	C
	ATOM	4128	N	THR	A	525	61.509	77.656	-17.275	1.00	0.00	N
	ATOM	4129	CA	THR	A	525	60.265	78.139	-16.707	1.00	0.00	C
50	ATOM	4130	C	THR	A	525	59.180	77.306	-17.378	1.00	0.00	C
	ATOM	4131	O	THR	A	525	59.191	77.145	-18.598	1.00	0.00	O
	ATOM	4132	CB	THR	A	525	60.028	79.623	-17.042	1.00	0.00	C
	ATOM	4133	OG1	THR	A	525	61.030	80.423	-16.402	1.00	0.00	O
	ATOM	4134	CG2	THR	A	525	58.659	80.065	-16.561	1.00	0.00	C
55	ATOM	4135	N	LEU	A	526	58.262	76.758	-16.590	1.00	0.00	N
	ATOM	4136	CA	LEU	A	526	57.180	75.972	-17.164	1.00	0.00	C
	ATOM	4137	C	LEU	A	526	56.183	76.911	-17.838	1.00	0.00	C
	ATOM	4138	O	LEU	A	526	55.925	78.011	-17.348	1.00	0.00	O
	ATOM	4139	CB	LEU	A	526	56.452	75.170	-16.079	1.00	0.00	C
60	ATOM	4140	CG	LEU	A	526	57.008	73.807	-15.666	1.00	0.00	C
	ATOM	4141	CD1	LEU	A	526	56.224	73.280	-14.470	1.00	0.00	C
	ATOM	4142	CD2	LEU	A	526	56.907	72.838	-16.833	1.00	0.00	C
	ATOM	4143	N	ASP	A	527	55.642	76.483	-18.973	1.00	0.00	N
	ATOM	4144	CA	ASP	A	527	54.646	77.274	-19.676	1.00	0.00	C
	ATOM	4145	C	ASP	A	527	53.404	76.400	-19.756	1.00	0.00	C

5	ATOM	4146	O	ASP	A	527	53.425	75.350	-20.389	1.00	0.00	O
	ATOM	4147	CB	ASP	A	527	55.121	77.635	-21.086	1.00	0.00	C
	ATOM	4148	CG	ASP	A	527	54.134	78.528	-21.818	1.00	0.00	C
	ATOM	4149	OD1	ASP	A	527	53.867	79.646	-21.324	1.00	0.00	O
	ATOM	4150	OD2	ASP	A	527	53.622	78.110	-22.881	1.00	0.00	O
	ATOM	4151	N	ASP	A	528	52.337	76.824	-19.089	1.00	0.00	N
10	ATOM	4152	CA	ASP	A	528	51.084	76.075	-19.076	1.00	0.00	C
	ATOM	4153	C	ASP	A	528	50.010	76.962	-19.688	1.00	0.00	C
	ATOM	4154	O	ASP	A	528	49.667	78.007	-19.139	1.00	0.00	O
	ATOM	4155	CB	ASP	A	528	50.704	75.713	-17.637	1.00	0.00	C
	ATOM	4156	CG	ASP	A	528	49.666	74.605	-17.564	1.00	0.00	C
	ATOM	4157	OD1	ASP	A	528	48.653	74.670	-18.294	1.00	0.00	O
15	ATOM	4158	OD2	ASP	A	528	49.865	73.667	-16.766	1.00	0.00	O
	ATOM	4159	N	SER	A	529	49.474	76.548	-20.827	1.00	0.00	N
	ATOM	4160	CA	SER	A	529	48.465	77.358	-21.491	1.00	0.00	C
	ATOM	4161	C	SER	A	529	47.059	77.161	-20.935	1.00	0.00	C
	ATOM	4162	O	SER	A	529	46.154	77.916	-21.277	1.00	0.00	O
	ATOM	4163	CB	SER	A	529	48.469	77.071	-22.995	1.00	0.00	C
20	ATOM	4164	OG	SER	A	529	47.890	75.810	-23.261	1.00	0.00	O
	ATOM	4165	N	ARG	A	530	46.869	76.167	-20.071	1.00	0.00	N
	ATOM	4166	CA	ARG	A	530	45.536	75.925	-19.536	1.00	0.00	C
	ATOM	4167	C	ARG	A	530	45.351	76.074	-18.030	1.00	0.00	C
	ATOM	4168	O	ARG	A	530	44.280	75.778	-17.502	1.00	0.00	O
	ATOM	4169	CB	ARG	A	530	45.036	74.560	-20.015	1.00	0.00	C
25	ATOM	4170	CG	ARG	A	530	44.929	74.517	-21.531	1.00	0.00	C
	ATOM	4171	CD	ARG	A	530	44.292	73.244	-22.057	1.00	0.00	C
	ATOM	4172	NE	ARG	A	530	45.038	72.051	-21.670	1.00	0.00	N
	ATOM	4173	CZ	ARG	A	530	44.816	70.843	-22.178	1.00	0.00	C
	ATOM	4174	NH1	ARG	A	530	43.869	70.678	-23.093	1.00	0.00	N
	ATOM	4175	NH2	ARG	A	530	45.535	69.801	-21.771	1.00	0.00	N
30	ATOM	4176	N	TRP	A	531	46.389	76.531	-17.337	1.00	0.00	N
	ATOM	4177	CA	TRP	A	531	46.277	76.764	-15.901	1.00	0.00	C
	ATOM	4178	C	TRP	A	531	47.246	77.837	-15.433	1.00	0.00	C
	ATOM	4179	O	TRP	A	531	48.444	77.753	-15.695	1.00	0.00	O
	ATOM	4180	CB	TRP	A	531	46.519	75.493	-15.085	1.00	0.00	C
	ATOM	4181	CG	TRP	A	531	46.418	75.781	-13.618	1.00	0.00	C
35	ATOM	4182	CD1	TRP	A	531	47.438	76.128	-12.773	1.00	0.00	C
	ATOM	4183	CD2	TRP	A	531	45.215	75.860	-12.846	1.00	0.00	C
	ATOM	4184	NE1	TRP	A	531	46.941	76.422	-11.524	1.00	0.00	N
	ATOM	4185	CE2	TRP	A	531	45.580	76.265	-11.542	1.00	0.00	C
	ATOM	4186	CE3	TRP	A	531	43.864	75.631	-13.130	1.00	0.00	C
	ATOM	4187	CZ2	TRP	A	531	44.638	76.446	-10.522	1.00	0.00	C
40	ATOM	4188	CZ3	TRP	A	531	42.925	75.813	-12.114	1.00	0.00	C
	ATOM	4189	CH2	TRP	A	531	43.319	76.216	-10.828	1.00	0.00	C
	ATOM	4190	N	PRO	A	532	46.738	78.857	-14.722	1.00	0.00	N
	ATOM	4191	CA	PRO	A	532	45.325	79.023	-14.358	1.00	0.00	C
	ATOM	4192	C	PRO	A	532	44.419	79.228	-15.567	1.00	0.00	C
	ATOM	4193	O	PRO	A	532	43.200	79.075	-15.473	1.00	0.00	O
45	ATOM	4194	CB	PRO	A	532	45.348	80.240	-13.433	1.00	0.00	C
	ATOM	4195	CG	PRO	A	532	46.700	80.135	-12.787	1.00	0.00	C
	ATOM	4196	CD	PRO	A	532	47.576	79.816	-13.980	1.00	0.00	C
	ATOM	4197	N	GLY	A	533	45.022	79.572	-16.700	1.00	0.00	N
	ATOM	4198	CA	GLY	A	533	44.255	79.771	-17.914	1.00	0.00	C
	ATOM	4199	C	GLY	A	533	44.067	81.220	-18.313	1.00	0.00	C
50	ATOM	4200	O	GLY	A	533	44.049	82.116	-17.466	1.00	0.00	O
	ATOM	4201	N	SER	A	534	43.933	81.449	-19.616	1.00	0.00	N
	ATOM	4202	CA	SER	A	534	43.734	82.792	-20.147	1.00	0.00	C
	ATOM	4203	C	SER	A	534	42.442	83.369	-19.578	1.00	0.00	C
	ATOM	4204	O	SER	A	534	41.400	82.711	-19.598	1.00	0.00	O
	ATOM	4205	CB	SER	A	534	43.655	82.744	-21.675	1.00	0.00	C
60	ATOM	4206	OG	SER	A	534	43.324	84.013	-22.208	1.00	0.00	O

	ATOM	4207	N	GLY	A	535	42.514	84.595	-19.069	1.00	0.00	N
	ATOM	4208	CA	GLY	A	535	41.337	85.223	-18.498	1.00	0.00	C
	ATOM	4209	C	GLY	A	535	41.207	84.928	-17.014	1.00	0.00	C
5	ATOM	4210	O	GLY	A	535	40.351	85.491	-16.330	1.00	0.00	O
	ATOM	4211	N	VAL	A	536	42.056	84.035	-16.516	1.00	0.00	N
	ATOM	4212	CA	VAL	A	536	42.040	83.669	-15.105	1.00	0.00	C
	ATOM	4213	C	VAL	A	536	43.218	84.336	-14.400	1.00	0.00	C
	ATOM	4214	O	VAL	A	536	43.078	84.885	-13.307	1.00	0.00	O
10	ATOM	4215	CB	VAL	A	536	42.147	82.134	-14.925	1.00	0.00	C
	ATOM	4216	CG1	VAL	A	536	42.091	81.774	-13.448	1.00	0.00	C
	ATOM	4217	CG2	VAL	A	536	41.022	81.443	-15.682	1.00	0.00	C
	ATOM	4218	N	GLU	A	537	44.378	84.292	-15.046	1.00	0.00	N
	ATOM	4219	CA	GLU	A	537	45.590	84.883	-14.495	1.00	0.00	C
15	ATOM	4220	C	GLU	A	537	46.675	84.972	-15.565	1.00	0.00	C
	ATOM	4221	O	GLU	A	537	47.086	83.956	-16.126	1.00	0.00	O
	ATOM	4222	CB	GLU	A	537	46.083	84.040	-13.310	1.00	0.00	C
	ATOM	4223	CG	GLU	A	537	47.529	84.290	-12.893	1.00	0.00	C
	ATOM	4224	CD	GLU	A	537	47.936	83.485	-11.665	1.00	0.00	C
20	ATOM	4225	OE1	GLU	A	537	49.153	83.284	-11.457	1.00	0.00	O
	ATOM	4226	OE2	GLU	A	537	47.042	83.058	-10.902	1.00	0.00	O
	ATOM	4227	N	ASP	A	538	47.126	86.188	-15.863	1.00	0.00	N
	ATOM	4228	CA	ASP	A	538	48.182	86.365	-16.855	1.00	0.00	C
	ATOM	4229	C	ASP	A	538	49.474	85.975	-16.153	1.00	0.00	C
25	ATOM	4230	O	ASP	A	538	50.127	86.806	-15.521	1.00	0.00	O
	ATOM	4231	CB	ASP	A	538	48.247	87.822	-17.326	1.00	0.00	C
	ATOM	4232	CG	ASP	A	538	49.236	88.022	-18.463	1.00	0.00	C
	ATOM	4233	OD1	ASP	A	538	49.147	87.282	-19.466	1.00	0.00	O
	ATOM	4234	OD2	ASP	A	538	50.100	88.919	-18.357	1.00	0.00	O
30	ATOM	4235	N	SER	A	539	49.832	84.700	-16.261	1.00	0.00	N
	ATOM	4236	CA	SER	A	539	51.021	84.179	-15.598	1.00	0.00	C
	ATOM	4237	C	SER	A	539	52.142	83.720	-16.521	1.00	0.00	C
	ATOM	4238	O	SER	A	539	53.318	83.855	-16.183	1.00	0.00	O
	ATOM	4239	CB	SER	A	539	50.626	83.013	-14.690	1.00	0.00	C
35	ATOM	4240	OG	SER	A	539	50.051	81.962	-15.450	1.00	0.00	O
	ATOM	4241	N	ARG	A	540	51.790	83.166	-17.676	1.00	0.00	N
	ATOM	4242	CA	ARG	A	540	52.814	82.682	-18.591	1.00	0.00	C
	ATOM	4243	C	ARG	A	540	53.684	83.795	-19.160	1.00	0.00	C
	ATOM	4244	O	ARG	A	540	53.211	84.890	-19.469	1.00	0.00	O
40	ATOM	4245	CB	ARG	A	540	52.184	81.839	-19.706	1.00	0.00	C
	ATOM	4246	CG	ARG	A	540	50.945	82.418	-20.342	1.00	0.00	C
	ATOM	4247	CD	ARG	A	540	50.190	81.336	-21.119	1.00	0.00	C
	ATOM	4248	NE	ARG	A	540	51.054	80.613	-22.053	1.00	0.00	N
	ATOM	4249	CZ	ARG	A	540	50.624	80.055	-23.181	1.00	0.00	C
45	ATOM	4250	NH1	ARG	A	540	49.342	80.137	-23.515	1.00	0.00	N
	ATOM	4251	NH2	ARG	A	540	51.474	79.423	-23.978	1.00	0.00	N
	ATOM	4252	N	THR	A	541	54.971	83.497	-19.280	1.00	0.00	N
	ATOM	4253	CA	THR	A	541	55.945	84.453	-19.773	1.00	0.00	C
	ATOM	4254	C	THR	A	541	55.965	84.548	-21.289	1.00	0.00	C
50	ATOM	4255	O	THR	A	541	55.590	83.610	-21.992	1.00	0.00	O
	ATOM	4256	CB	THR	A	541	57.366	84.077	-19.317	1.00	0.00	C
	ATOM	4257	OG1	THR	A	541	57.867	83.026	-20.151	1.00	0.00	O
	ATOM	4258	CG2	THR	A	541	57.356	83.592	-17.874	1.00	0.00	C
	ATOM	4259	N	THR	A	542	56.405	85.699	-21.783	1.00	0.00	N
55	ATOM	4260	CA	THR	A	542	56.517	85.919	-23.213	1.00	0.00	C
	ATOM	4261	C	THR	A	542	57.974	85.685	-23.579	1.00	0.00	C
	ATOM	4262	O	THR	A	542	58.879	86.159	-22.889	1.00	0.00	O
	ATOM	4263	CB	THR	A	542	56.159	87.373	-23.610	1.00	0.00	C
	ATOM	4264	OG1	THR	A	542	54.781	87.629	-23.322	1.00	0.00	O
60	ATOM	4265	CG2	THR	A	542	56.411	87.593	-25.099	1.00	0.00	C
	ATOM	4266	N	ILE	A	543	58.204	84.924	-24.640	1.00	0.00	N
	ATOM	4267	CA	ILE	A	543	59.564	84.693	-25.092	1.00	0.00	C

5	ATOM	4268	C	ILE	A	543	59.896	85.966	-25.866	1.00	0.00	C
	ATOM	4269	O	ILE	A	543	59.314	86.226	-26.921	1.00	0.00	O
	ATOM	4270	CB	ILE	A	543	59.647	83.466	-26.017	1.00	0.00	C
	ATOM	4271	CG1	ILE	A	543	59.334	82.200	-25.208	1.00	0.00	C
	ATOM	4272	CG2	ILE	A	543	61.031	83.380	-26.659	1.00	0.00	C
10	ATOM	4273	CD1	ILE	A	543	59.377	80.920	-26.014	1.00	0.00	C
	ATOM	4274	N	ILE	A	544	60.803	86.769	-25.318	1.00	0.00	N
	ATOM	4275	CA	ILE	A	544	61.184	88.030	-25.937	1.00	0.00	C
	ATOM	4276	C	ILE	A	544	62.405	87.881	-26.835	1.00	0.00	C
	ATOM	4277	O	ILE	A	544	63.512	87.604	-26.371	1.00	0.00	O
15	ATOM	4278	CB	ILE	A	544	61.448	89.105	-24.857	1.00	0.00	C
	ATOM	4279	CG1	ILE	A	544	60.187	89.289	-24.007	1.00	0.00	C
	ATOM	4280	CG2	ILE	A	544	61.833	90.427	-25.508	1.00	0.00	C
	ATOM	4281	CD1	ILE	A	544	60.306	90.354	-22.939	1.00	0.00	C
	ATOM	4282	N	LEU	A	545	62.183	88.057	-28.132	1.00	0.00	N
20	ATOM	4283	CA	LEU	A	545	63.245	87.944	-29.121	1.00	0.00	C
	ATOM	4284	C	LEU	A	545	63.407	89.277	-29.850	1.00	0.00	C
	ATOM	4285	O	LEU	A	545	62.465	90.060	-29.937	1.00	0.00	O
	ATOM	4286	CB	LEU	A	545	62.902	86.840	-30.124	1.00	0.00	C
	ATOM	4287	CG	LEU	A	545	62.592	85.457	-29.537	1.00	0.00	C
25	ATOM	4288	CD1	LEU	A	545	62.141	84.522	-30.649	1.00	0.00	C
	ATOM	4289	CD2	LEU	A	545	63.828	84.901	-28.829	1.00	0.00	C
	ATOM	4290	N	GLY	A	546	64.604	89.530	-30.368	1.00	0.00	N
	ATOM	4291	CA	GLY	A	546	64.852	90.770	-31.083	1.00	0.00	C
	ATOM	4292	C	GLY	A	546	66.276	90.850	-31.597	1.00	0.00	C
30	ATOM	4293	O	GLY	A	546	67.201	90.370	-30.949	1.00	0.00	O
	ATOM	4294	N	GLU	A	547	66.454	91.465	-32.761	1.00	0.00	N
	ATOM	4295	CA	GLU	A	547	67.777	91.600	-33.364	1.00	0.00	C
	ATOM	4296	C	GLU	A	547	68.770	92.241	-32.401	1.00	0.00	C
	ATOM	4297	O	GLU	A	547	69.947	91.881	-32.373	1.00	0.00	O
35	ATOM	4298	CB	GLU	A	547	67.696	92.459	-34.628	1.00	0.00	C
	ATOM	4299	CG	GLU	A	547	66.676	91.990	-35.651	1.00	0.00	C
	ATOM	4300	CD	GLU	A	547	66.538	92.962	-36.812	1.00	0.00	C
	ATOM	4301	OE1	GLU	A	547	67.527	93.141	-37.558	1.00	0.00	O
	ATOM	4302	OE2	GLU	A	547	65.444	93.551	-36.972	1.00	0.00	O
40	ATOM	4303	N	ASP	A	548	68.287	93.193	-31.611	1.00	0.00	N
	ATOM	4304	CA	ASP	A	548	69.140	93.901	-30.667	1.00	0.00	C
	ATOM	4305	C	ASP	A	548	69.165	93.319	-29.256	1.00	0.00	C
	ATOM	4306	O	ASP	A	548	69.748	93.923	-28.353	1.00	0.00	O
	ATOM	4307	CB	ASP	A	548	68.720	95.372	-30.590	1.00	0.00	C
45	ATOM	4308	CG	ASP	A	548	68.921	96.106	-31.900	1.00	0.00	C
	ATOM	4309	OD1	ASP	A	548	70.067	96.147	-32.390	1.00	0.00	O
	ATOM	4310	OD2	ASP	A	548	67.933	96.644	-32.439	1.00	0.00	O
	ATOM	4311	N	ILE	A	549	68.556	92.153	-29.055	1.00	0.00	N
	ATOM	4312	CA	ILE	A	549	68.541	91.570	-27.716	1.00	0.00	C
50	ATOM	4313	C	ILE	A	549	68.763	90.060	-27.658	1.00	0.00	C
	ATOM	4314	O	ILE	A	549	69.592	89.583	-26.885	1.00	0.00	O
	ATOM	4315	CB	ILE	A	549	67.213	91.912	-26.980	1.00	0.00	C
	ATOM	4316	CG1	ILE	A	549	67.234	91.348	-25.557	1.00	0.00	C
	ATOM	4317	CG2	ILE	A	549	66.027	91.351	-27.743	1.00	0.00	C
55	ATOM	4318	CD1	ILE	A	549	68.310	91.944	-24.678	1.00	0.00	C
	ATOM	4319	N	LEU	A	550	68.034	89.310	-28.477	1.00	0.00	N
	ATOM	4320	CA	LEU	A	550	68.152	87.853	-28.478	1.00	0.00	C
	ATOM	4321	C	LEU	A	550	67.488	87.279	-29.724	1.00	0.00	C
	ATOM	4322	O	LEU	A	550	66.284	87.430	-29.923	1.00	0.00	O
60	ATOM	4323	CB	LEU	A	550	67.479	87.283	-27.226	1.00	0.00	C
	ATOM	4324	CG	LEU	A	550	67.571	85.771	-27.006	1.00	0.00	C
	ATOM	4325	CD1	LEU	A	550	69.021	85.384	-26.764	1.00	0.00	C
	ATOM	4326	CD2	LEU	A	550	66.715	85.372	-25.817	1.00	0.00	C
	ATOM	4327	N	PRO	A	551	68.265	86.600	-30.578	1.00	0.00	N
	ATOM	4328	CA	PRO	A	551	67.694	86.028	-31.799	1.00	0.00	C

5	ATOM	4329	C	PRO	A	551	66.889	84.732	-31.671	1.00	0.00	C
	ATOM	4330	O	PRO	A	551	65.930	84.529	-32.415	1.00	0.00	O
	ATOM	4331	CB	PRO	A	551	68.916	85.867	-32.700	1.00	0.00	C
	ATOM	4332	CG	PRO	A	551	70.002	85.563	-31.730	1.00	0.00	C
	ATOM	4333	CD	PRO	A	551	69.739	86.541	-30.606	1.00	0.00	C
10	ATOM	4334	N	SER	A	552	67.261	83.859	-30.740	1.00	0.00	N
	ATOM	4335	CA	SER	A	552	66.543	82.594	-30.601	1.00	0.00	C
	ATOM	4336	C	SER	A	552	66.366	82.135	-29.161	1.00	0.00	C
	ATOM	4337	O	SER	A	552	66.993	82.659	-28.243	1.00	0.00	O
	ATOM	4338	CB	SER	A	552	67.258	81.496	-31.392	1.00	0.00	C
15	ATOM	4339	OG	SER	A	552	68.563	81.285	-30.886	1.00	0.00	O
	ATOM	4340	N	LYS	A	553	65.508	81.135	-28.985	1.00	0.00	N
	ATOM	4341	CA	LYS	A	553	65.204	80.589	-27.670	1.00	0.00	C
	ATOM	4342	C	LYS	A	553	64.897	79.092	-27.735	1.00	0.00	C
	ATOM	4343	O	LYS	A	553	64.152	78.633	-28.602	1.00	0.00	O
20	ATOM	4344	CB	LYS	A	553	63.999	81.332	-27.078	1.00	0.00	C
	ATOM	4345	CG	LYS	A	553	63.465	80.740	-25.773	1.00	0.00	C
	ATOM	4346	CD	LYS	A	553	64.499	80.803	-24.656	1.00	0.00	C
	ATOM	4347	CE	LYS	A	553	64.818	82.244	-24.264	1.00	0.00	C
	ATOM	4348	NZ	LYS	A	553	65.931	82.304	-23.268	1.00	0.00	N
25	ATOM	4349	N	HIS	A	554	65.477	78.334	-26.812	1.00	0.00	N
	ATOM	4350	CA	HIS	A	554	65.238	76.898	-26.752	1.00	0.00	C
	ATOM	4351	C	HIS	A	554	64.046	76.596	-25.857	1.00	0.00	C
	ATOM	4352	O	HIS	A	554	63.878	77.220	-24.808	1.00	0.00	O
	ATOM	4353	CB	HIS	A	554	66.454	76.157	-26.186	1.00	0.00	C
30	ATOM	4354	CG	HIS	A	554	67.597	76.039	-27.143	1.00	0.00	C
	ATOM	4355	ND1	HIS	A	554	68.249	74.847	-27.375	1.00	0.00	N
	ATOM	4356	CD2	HIS	A	554	68.225	76.965	-27.904	1.00	0.00	C
	ATOM	4357	CE1	HIS	A	554	69.230	75.045	-28.236	1.00	0.00	C
	ATOM	4358	NE2	HIS	A	554	69.238	76.321	-28.572	1.00	0.00	N
35	ATOM	4359	N	VAL	A	555	63.227	75.640	-26.286	1.00	0.00	N
	ATOM	4360	CA	VAL	A	555	62.066	75.192	-25.530	1.00	0.00	C
	ATOM	4361	C	VAL	A	555	62.113	73.669	-25.532	1.00	0.00	C
	ATOM	4362	O	VAL	A	555	62.600	73.059	-26.490	1.00	0.00	O
	ATOM	4363	CB	VAL	A	555	60.729	75.651	-26.160	1.00	0.00	C
40	ATOM	4364	CG1	VAL	A	555	60.615	77.168	-26.092	1.00	0.00	C
	ATOM	4365	CG2	VAL	A	555	60.620	75.156	-27.591	1.00	0.00	C
	ATOM	4366	N	VAL	A	556	61.607	73.059	-24.466	1.00	0.00	N
	ATOM	4367	CA	VAL	A	556	61.619	71.607	-24.344	1.00	0.00	C
	ATOM	4368	C	VAL	A	556	60.260	71.052	-23.925	1.00	0.00	C
45	ATOM	4369	O	VAL	A	556	59.629	71.579	-23.012	1.00	0.00	O
	ATOM	4370	CB	VAL	A	556	62.662	71.155	-23.286	1.00	0.00	C
	ATOM	4371	CG1	VAL	A	556	62.607	69.638	-23.106	1.00	0.00	C
	ATOM	4372	CG2	VAL	A	556	64.059	71.595	-23.704	1.00	0.00	C
	ATOM	4373	N	MET	A	557	59.817	69.988	-24.591	1.00	0.00	N
50	ATOM	4374	CA	MET	A	557	58.551	69.343	-24.244	1.00	0.00	C
	ATOM	4375	C	MET	A	557	58.803	67.991	-23.576	1.00	0.00	C
	ATOM	4376	O	MET	A	557	59.709	67.253	-23.966	1.00	0.00	O
	ATOM	4377	CB	MET	A	557	57.683	69.127	-25.492	1.00	0.00	C
	ATOM	4378	CG	MET	A	557	56.649	70.216	-25.760	1.00	0.00	C
55	ATOM	4379	SD	MET	A	557	57.362	71.859	-25.908	1.00	0.00	S
	ATOM	4380	CE	MET	A	557	58.355	71.676	-27.418	1.00	0.00	C
	ATOM	4381	N	HIS	A	558	58.002	67.675	-22.564	1.00	0.00	N
	ATOM	4382	CA	HIS	A	558	58.114	66.397	-21.866	1.00	0.00	C
	ATOM	4383	C	HIS	A	558	56.828	65.609	-22.085	1.00	0.00	C
60	ATOM	4384	O	HIS	A	558	55.737	66.187	-22.082	1.00	0.00	O
	ATOM	4385	CB	HIS	A	558	58.319	66.611	-20.364	1.00	0.00	C
	ATOM	4386	CG	HIS	A	558	58.230	65.350	-19.558	1.00	0.00	C
	ATOM	4387	ND1	HIS	A	558	57.261	65.146	-18.599	1.00	0.00	N
	ATOM	4388	CD2	HIS	A	558	58.990	64.229	-19.570	1.00	0.00	C
	ATOM	4389	CE1	HIS	A	558	57.429	63.955	-18.054	1.00	0.00	C